Midwifery in Mexico
The information presented here summarizes the findings published in MacArthur Foundation’s initiative to promote midwifery in Mexico: Complete baseline report, by Lucille C. Atkin, Kimberli Keith-Brown, Martha W. Rees and Paola Sesia with the assistance of Aitza Calixto, Rebeca Hernández and Fátima Valdivia in 2016.

This publication was made possible thanks to the support of the John D. and Catherine T. MacArthur Foundation.

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INTRODUCTION

Although Mexico reduced its maternal mortality ratio (MMR) by 57.8%\(^1\) between 1990 and 2015, the country did not fulfill its commitment to reduce the MMR by three quarters, as outlined in the Millennium Development Goals. Moreover, the 2016 MMR of 38.9 deaths per 100,000 live births, as a national average, conceals vast disparities and inequalities within the country.\(^2\) For example, in 2012, the risk of dying from pregnancy-related causes was five times higher for women in the country’s poorest 100 municipalities,\(^3\) and three times higher for indigenous women.\(^4\) The vast majority of these deaths could be avoided if all women received skilled care prior to conception, during pregnancy, delivery, and in the postpartum period. This strategy would also prevent many neonatal and infant deaths.

Despite progress in the coverage and quality of services, enormous gaps remain in the access to skilled maternal healthcare. To address this situation, the Mexican government is leading a movement – in collaboration with multiple partners – to strengthen the role of professional midwives in the continuum of women’s healthcare. Evidence shows that investing in competent, motivated, and enabled midwifery personnel is a cost-effective strategy to improve the quality of care and maternal and neonatal health outcomes.\(^5\)

In support of this initiative, the MacArthur Foundation commissioned a baseline study on the state of professional midwifery in Mexico, encompassing five key components for the institutionalization of midwifery: 1) legal and normative framework; 2) actors who define the public agenda; 3) midwifery training programs; 4) employment opportunities in health facilities; and 5) midwifery and the quality of care.\(^6\)

This document summarizes the findings of that baseline study, pinpointing priorities for advocacy. It is geared to all individuals and institutions dedicated to promoting professional midwifery in Mexico. It seeks to provide evidence to support the integration of professional midwifery in the public health agenda as an essential strategy to improve the quality of maternal and reproductive care, reduce maternal morbidity and mortality, and fulfill the Sustainable Development Goals that Mexico ratified in 2015.
Childbirth care in Mexico

Midwifery has a long history in Mexico, beginning with the ancestral practice of traditional midwives throughout the country. Despite this, neither traditional nor professional midwives have had due recognition, or clearly defined participation in the healthcare system to date.

Currently, 96% of deliveries in Mexico are attended by doctors in secondary level hospitals, leading to a saturation of maternity services; hospitals sometimes lack sufficient staff or financial or material resources to provide high quality maternal health care. Excessive demand for services has resulted in situations of mistreatment of women and their infants, including cases of obstetric violence. In addition, pressure has also led to the routine use of practices that are not evidence-based, and to the excessive medicalization of delivery. For example, Mexico has the fourth highest rate of C-sections in the world and the second in Latin America, with the C-section rate almost doubling in the last 15 years.  

1833
Professional midwifery is born with the establishment of the School of Midwifery, linked to the Medicine and Surgery degree. Midwives study the same topics as physicians and they both work together in maternity hospitals.

1880 - 1900
The government establishes the School of Gynecology. Requirements for midwifery increase; physicians begin to displace professional midwives and criticize the practice of midwifery.

1900 - 1960
The degree in Nursing and Midwifery, as a specialization of Nursing, is created. Obstetric nurses oversee pre- and perinatal care and attend most hospital deliveries.

Traditional midwives enjoy enormous prestige and attend births using a variety of natural therapies to alleviate childbirth problems.
There is increasing awareness of the importance of high-quality, women-centered sexual and reproductive health care, as well as of providers’ technical and interpersonal skills throughout the continuum of care. The movement for respectful childbirth has led to the growing recognition of birth as a natural event that only requires medical intervention when there is a medical complication. This model, however, is not compatible with the current organization of public health services, in which most births are attended by general doctors and ob-gyns in the hospital.

On the global level, evidence clearly shows that investing in competent, motivated, and enabled midwifery personnel is a cost-effective strategy to improve quality and ensure continuity of care. According to a report on midwifery in Mexico, skilled providers only cover 61% of the maternal-neonatal healthcare needs of the population. Enabling professional midwives to attend routine deliveries at the primary and intermediate levels, while ensuring timely access to emergency obstetric care, could be a critical strategy to close the health workforce gap in Mexico.

In response to MDG 5 to reduce maternal mortality, Mexico adopts the strategy of attending all deliveries in hospitals in order to ensure access to emergency obstetric care.

**1960 - 1980**
- Hospitals stop hiring nurse midwives to practice midwifery.
- Physicians attend all hospital deliveries; the public sector trains traditional midwives in family planning and safe childbirth to cover deliveries in rural areas.

**‘80**
- Primary care, including childbirth attended by physicians, expands to rural areas. Hospitals hire midwives as general nurses.
- A new paradigm focused on risk management and safe motherhood emerges. Risk detection is given priority in prenatal care, and potentially complicated cases are referred to hospitals. Traditional midwives continue to be trained in safety procedures, although without recognition of their clinical and sociocultural skills.

**‘90**
- The Secretariat of Health gives priority to ensuring access to emergency obstetric care, based on the fact that obstetric complications cannot always be foreseen, but can be managed with immediate access to skilled care and adequate resources and facilities.

**2000 +**
- Hospitals stop hiring nurse midwives to practice midwifery.
- Physicians attend all hospital deliveries; the public sector trains traditional midwives in family planning and safe childbirth to cover deliveries in rural areas.

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*a.* In this document, the term professional midwife refers to: 1) nurse midwives that attend deliveries, i.e. those with a degree in Nursing and Obstetrics or a degree in Sexual and Reproductive Health and Professional Midwifery as well as Perinatal Nurses, even if they themselves do not identify with the term midwife, 2) technical midwives and 3) autonomous midwives.
In women-centered services, women are at the center of their pregnancy, childbirth, and the puerperium, or the postpartum period. They decide how, where, and with whom to give birth, within a human rights framework. Labor and delivery should be a special, pleasant and dignified experience. 

In June 2016, the Secretariat of Health approved a revised version of Mexican Official Norm 007 for the care of women during pregnancy, childbirth, and the puerperium, and for the care of newborns. The norm makes specific reference to midwives as skilled care providers who can attend low-risk births. Compliance with this norm is mandatory at the federal level for all healthcare personnel in both public and private sectors.

This norm, along with the 2011 labor code for hiring technical midwives, is an important milestone for the recognition of midwifery. Also, the Secretariat of Health’s 2014 Clinical Practice Guide: Monitoring and management of labor in low risk pregnancies is another example of efforts to incorporate evidence-based practices in maternal healthcare.

However, this progress must be buttressed by a national midwifery model with clear operative guidelines. In the absence of a federal regulatory framework, the inclusion of midwives in the public health sector has been inconsistent and dependent on state-level and/or management priorities. An imminent priority is to harmonize all elements of the normative and regulatory framework so as to have clear guidelines for the provision of high-quality maternal healthcare for all.

“We do not have guidelines or a model of care in midwifery. On the operative level, we must adapt to what is already there. We need to know how to work and the scope and responsibilities of each healthcare provider.”
(State Government Employee)

The baseline assessment found that a broad range of actors favor the inclusion of professional midwives in the healthcare system and are open to their attending low-risk deliveries at the primary level. However, dissemination and broad implementation of Norm 007 is essential to generate more ample support for midwifery. Confusion about the competencies of professional and traditional midwives persists, and technical midwives are not always considered “professionals” since they do not have a university degree. Furthermore, midwives are often excluded from the definition of “skilled personnel.”
“There are many standards, but up to what point do they apply? We need to create enabling environments... vertical accountability ...and a much more integral normative framework...”
(Federal Government Employee)

It is critical to understand precisely the role of professional midwifery, who midwives are, what their skills or competencies are, and what they can do in the framework of maternal health. The lack of knowledge about midwifery competencies and midwives’ added value appears to be the biggest obstacle in the promotion of professional midwifery at this time.

Recommendations:

- Promote the creation of a legal and normative framework for an evidence-based women-centered model of maternal healthcare led by professional midwives.

- Encourage the implementation of systems to monitor the application of this model in the public sector.

- Given that there is no agreement on the ideal model of care, it is essential to disseminate information about midwifery competencies, training standards, and successful midwifery models, to promote dialogue and reach a consensus among different actors.

- Partner with media to help sensitize the public about the respectful and high-quality sexual and reproductive care, including maternal, that midwives provide.

The profession of midwifery includes the services and personnel necessary to provide quality care and support to women throughout their sexual and reproductive life, including pregnancy, childbirth, and the postpartum period, as well as care for their newborns.
Location and description of midwifery training programs

**Autonomous midwifery**
- 26 students
- 40-95 required births
- No accreditation

**Technical midwifery**
- 80 students
- 80 required births
- RVOE accreditation
- Three years of technical training after three years of secondary education

**University Degree in Nursing and Obstetrics (LEO)**
- 150 students
- 100 required births
- RVOE accreditation
- University level

**University Degree in Reproductive Health and Professional Midwifery**
- 21 students
- 100 required births
- State RVOE accreditation
- University level

**Specialization in Perinatal Nursing (EEP)**
- 40 students
- 60 required births
- RVOE accreditation
- Post-graduate level
Midwifery training in Mexico

The baseline report identified 11 midwifery training programs operating in the country that had as a graduation requirement attending 40 births. These programs are primarily concentrated in Mexico City and in the south of the country.

The Interinstitutional Committee on Training for Human Resources in Health (known as CIFRHS, in Spanish), seated in the Secretariats of Health and Public Education, accredits all academic programs and issues the “Favorable Technical Opinion.” This Opinion allows programs to obtain the Recognition of Official Validity of Studies (RVOE) from the Secretariat of Public Education. With this recognition, training programs can give their students an official license that enables them to be hired in the public sector. Autonomous midwifery schools do not have access to the RVOE, and therefore, their graduates can only practice in the private sector.

The CIFRHS also certifies healthcare personnel, including nurses, who must pass a national examination to graduate. A midwifery subcommittee was created in 2014 and is currently preparing a proposal of the midwifery competencies necessary for certification. This certification will help to validate the competencies of graduates with diverse educational experiences.

The baseline study assessed to what extent training programs covered evidence-based practices. Researchers used a list of 20 practices: the 17 practices recommended by the World Health Organization (WHO) and three practices geared toward strengthening the cultural pertinence of the care provided. The autonomous training programs teach all of the practices, while the technical midwifery programs teach 19 of them. The other programs offer less training in evidence-based practices (between 13 and 16).

An added challenge in the training of midwifery personnel is the lack of opportunities to practice in facilities with adequate supervision. Given that all the evidence-based practices are not performed in current obstetric practice, it was difficult for the trainees to apply them. Furthermore, students were occasionally urged to use practices and methods that are not based on the latest scientific evidence, which they had been instructed to avoid in their theoretical studies. It is of utmost importance to create more clinical sites that implement evidence-based practices on a routine basis and where midwifery students can do their residencies.
“I had to learn how to attend deliveries in the lithotomy position. I had to learn how to repair episiotomies, particularly when I was working with gynecology residents. There is a lot of pressure since they constantly question us and we do not have the freedom to act.” (Technical Midwife, hospital)

Mexico would need 2,700 qualified midwives if midwives were to attend a minimum of 20% of 2,400,000 (or 480,000) annual births. Many more if it hopes to achieve the percentages of countries with institutionalized midwifery, such as Peru and Chile (60%-70%).

With the current educational resources, Mexico could quintuple the number of midwives in a short period. This is possible due to the launch of the new nursing and obstetrics program of the National School of Nursing and Obstetrics (ENEO) of the Universidad Nacional Autónoma de México (UNAM),e and its 17 affiliated programs, from which the first class will graduate in 2017, as well as new midwifery programs in Michoacán and Oaxaca.

However, this workforce growth can only happen if the following obstacles are addressed: the lack of physical space in the schools, the lack of clinical units where students can do their residencies, the high costs of the courses, and few scholarships for students. Finally, it is necessary to improve hiring and compensation and guarantee job stability.

Recommendations:

- Promote the establishment of more clinical sites where students can apply evidence-based practices.

- Ensure that all programs of study train midwives in the seven basic midwifery competencies and evidence-based practices, within a framework of human rights, gender and interculturality.

- Provide financial support to indigenous and/or low income midwives so that they can access studies. Increase the educational offerings to other states.

d. Based on the WHO calculation that each midwife can attend 175 births per year.

e. The new ENEO program initiated in 2015 has a strong focus on obstetrics and gender.
Create a certification system to verify competencies as a safety measure for both users as well as for midwives.

Strengthen exchanges between academic programs and clinical facilities to promote continuing improvements in training.

How are midwives currently placed in health facilities?

We know that competent professional midwives who are regulated and work in an enabling environment can compensate for the shortages of qualified healthcare personnel and improve access to and quality of care in maternal health. How is this workforce currently positioned within the Mexican healthcare system?

The baseline report identified 15 facilities with 187 midwives attending births. In nine, they work within a midwifery model of care that is woman-centered and evidence-based. In the other facilities, births attended by professional midwives are not the norm.

In terms of job stability, almost half of the 187 midwives, particularly nursing and obstetrics graduates (48%) and technical midwives (72%), have short-term contracts or no contract at all. Technical midwives have a labor code, but nursing and obstetrics graduates are hired as general nurses, which affects both their wages and work responsibilities, in addition to their ability to perform autonomously.

An enabling environment is an environment where appropriate regulation exists and competent midwives can carry out evidence-based practices. Use of these practices is taught and promoted in institutionalized midwifery programs, while hospital environments offer few opportunities to use them.

For example, in 2015, prior to the ENEO curriculum update, technical midwives received more training in evidence-based practices than nursing and obstetrics graduates. However, once in their work positions – almost always hospitals – technical midwives had fewer opportunities to perform them. The opposite occurs with nursing and obstetrics graduates: they
received less training on evidence-based practices, but many learned to use them once they entered the public sector.

“I learned what humanized delivery meant in this place and I try to apply it. During my training, they taught me hospital care. I like the humanized delivery approach much more.”

(Nursing and obstetrics graduate, maternity hospital)

Interpersonal relations are essential to the successful practice of midwifery. Half of the midwives reported having difficult relations with others in the healthcare team, encountering jealousy, misunderstandings, a lack of support and even antagonism. Few were satisfied with their work environment.

The environment also has an impact on midwives’ opportunities to practice midwifery. Few births are attended at the primary level as most women are referred to hospitals to give birth, whether by preference, resistance of the medical staff to attend births, or indication based on protocols that are not consistent with the latest evidence. On the other hand, in hospitals, midwives attend a very small number of births since priority is given to medical residents. This impacts midwives’ productivity.

Weak referral systems aggravate the situation. Given lack of equipment, access to timely and reliable transportation, and persistent communication...
Evidence-based practices that are learned vs. used

- Can choose position for delivery
- Free to walk during labor
- Light food allowed
- Liquids allowed
- Woman can choose who will accompany her

<table>
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<tr>
<th>OBSTETRIC NURSES</th>
<th>PERINATAL NURSES</th>
<th>TECHNICAL MIDWIVES</th>
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<td>Training</td>
<td>On the job</td>
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and coordination problems between the different levels of care, the most reasonable option is to refer any delivery to the secondary level of care, to ensure access to emergency obstetric care if complications arise.

**Recommendations:**

- Create labor codes so that midwives can be hired as such in healthcare facilities in the public sector.
- Ensure that midwives are compensated based on their skills and level of responsibility.
- Reorganize maternal healthcare services and promote the establishment of models of midwife-provided maternal healthcare that are women-centered and evidence-based.
- Strengthen referral and counter-referral systems so midwives can attend births at primary level facilities.
- Increase healthcare providers’ knowledge about the skills and role of professional midwives within the healthcare team.

**Midwifery and the quality of maternal health**

The quality of care provided during childbirth includes healthcare workers’ technical and interpersonal skills, but also depends on the systemic conditions of the facility where they work, and the guarantee of safe, effective, acceptable, and accessible services.¹

The baseline study compared the quality of care provided by professional midwives and other types of healthcare providers in different levels of care. Researchers interviewed 40 midwives and 30 physicians and residents to learn how they self-reported the services that they provide in primary and secondary level facilities.

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¹ The results presented are based on interviews conducted in 14 healthcare facilities with numerous deliveries. Only comparisons of care during labor and the postpartum period are included here since that is where the differences in quality were most distinct.

¹ WHO definition of quality of care.
The work environment determines in large part whether or not a midwife is able to provide quality care that is based on scientific evidence and that is culturally pertinent and human-rights based. We must foster the creation of more enabling environments where midwives can provide quality maternal and neonatal care.

Midwives reported using evidence-based practices more consistently than any other type of provider, although, both physicians and midwives reported using some unnecessary practices that are not based on the latest available evidence.

Independent of type of provider, research showed that the level of care impacted the implementation of evidence-based practices. At the primary level, 93% of the providers, both physicians and midwives, reported a high degree of compliance with evidence-based practices, whereas only 45% reported use of evidence-based practices in the intermediate level and 0% in general hospitals (Graph 1).

GRAPH 1: Percentage of compliance with evidence-based practices by level of care

- PRIMARY N:28 93% *
- INTERMEDIATE N:20 45% *
- SECONDARY N:22 0% *

*Statistically significant differences with p≤ 0.05.

Women’s perspective

In this study, the women attended by professional midwives reported being exposed to more evidence-based practices than those attended by physicians. Walking freely is a good example of a no-cost intervention with proven positive effects in the development of labor. Eighty percent of women attended by midwives could walk about freely during labor, while only 23% of those attended by physicians could do so. It is important to note that this result could also be related to the care environment. When compared by levels, women cared for at the primary level reported experiencing more evidence-based practices than those cared for in hospitals.
Activists, associations of professional midwives – whether technical or obstetric and perinatal nurses – civil society, academia, healthcare providers, and donor organizations should connect to strengthen collaboration, and form a wide network for the promotion of professional midwifery.
Although there were no conclusive results in terms of preferences, the women attended by midwives highlighted that they were cared for with respect and that midwives instilled confidence and tranquility in them. The women valued how thoroughly midwives addressed their questions and concerns.

In conclusion, results from the baseline assessment indicate that the primary level of care and basic community hospitals are the most appropriate environments for the practice of professional midwifery, provided they have immediate and streamlined access to emergency obstetric and neonatal care.

**Promoting midwifery**

Sexual and reproductive healthcare, including maternal and neonatal care, provided by professional midwives results in higher satisfaction on the part of women, as well as better maternal and neonatal health outcomes.

To be effective, professional midwives need specific and explicit recognition as competent healthcare providers as part of a health team and within functional and effective environments.
What can we do?

- Build and/or strengthen alliances among different actors committed to midwifery to show why midwifery is essential to a women-centered model of obstetric care, using evidence-based messages and examples of good practices.

- Advocate for the inclusion of evidence-based practices in norms and clinical practice guidelines. Promote their broad dissemination and used at all levels of obstetric care. Set up better monitoring systems to track their application.

- Promote the shift of low-risk deliveries to midwives at the primary level, with clear roles and responsibilities for the entire healthcare team, and effective referral systems to emergency obstetric and neonatal care facilities.

- Ensure, through midwives, greater continuity of care throughout women’s sexual and reproductive lives, including before conception, and during pregnancy and the puerperium.

- Document and disseminate successful women-centered midwifery care models in order to improve the understanding of the role and potential of midwives, and promote their uptake.

- Define competency-based midwifery training standards and curricula that include the basic midwifery competencies plus additional practices and approaches that each type of midwife can use in her or his practice.
Create a competency-based certification system to ensure that midwives can demonstrate that they have acquired knowledge and experience in evidence-based clinical practices.

Establish more facilities that implement evidence-based practices so that students can apply what they learned in their training courses.

Create job descriptions and well-paid positions so that potential students can envision a clear professional path as a result of their midwifery studies.

Ensure healthcare financing to hire midwives in positions that correspond to their training, skills, and responsibilities.

Integrate midwives in enabling work environments so that they can carry out evidence-based practices.

Promote good communication between physicians, nurses, and midwives, encouraging mutual support and collaboration among health team members.

Investing in professional midwives with the skills to respond to a wide range of sexual and reproductive health needs, including maternal health, as an integral part of the health network, will lead to better health outcomes: reduced maternal and neonatal morbidity and mortality, improved quality of care and increased access to sexual and reproductive health services.
References


8. Ibid 5


13. Ibid 5


If midwifery-led care were available and accessible to all women and babies, two thirds of maternal deaths and half of neonatal deaths could be avoided, provided the midwives have good training, access to appropriate equipment, and the necessary support.\textsuperscript{15}