Strengthening Midwifery in Mexico: Evaluation of Progress 2015-2018

January 2019 Report to the John D. and Catherine T. MacArthur Foundation

Lucille C. Atkin, Kimberli Keith-Brown, Martha W. Rees, Paola Sesia with Gabriela Blanco, Dolores Coronel, Gilmaro Cuellar, Rebeca Hernández, and Clara Yang
# TABLE OF CONTENTS

## GLOSSARY

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

## KEY CONCEPTS

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

## EXECUTIVE SUMMARY

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
</tr>
</tbody>
</table>

## INTRODUCTION

1. SETTING THE STAGE FOR THE INITIATIVE
   1.1 Background and Purpose
   1.2 Contextual Developments since Baseline

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
</tbody>
</table>

## THEORY OF CHANGE

2. CONTRIBUTING TO THE SOLUTION: INITIATIVE TO PROMOTE PROFESSIONAL MIDWIFERY IN MEXICO
   2.1 Evolution of the Theory of Change 2015-2018
   2.2 Indicators

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
</tr>
<tr>
<td>16</td>
</tr>
</tbody>
</table>

## THE INITIATIVE

3. IMPLEMENTING THE VISION
   3.1 Grant Making Portfolio
   3.2 Networking Strategies

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
</tr>
<tr>
<td>17</td>
</tr>
</tbody>
</table>

## METHOD

4. MEASURING CHANGES SINCE BASELINE
   4.1 Methodology
   4.2 Methodological Limitations

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
</tr>
<tr>
<td>20</td>
</tr>
</tbody>
</table>

## RESULTS

5. CHANGES SINCE BASELINE
   5.1 Legal and Normative Framework
   5.2 Recognition and Demand
   5.3 Educational Programs
   5.4 Employment and Quality of Care
   5.5 Theory of Change at the State Level

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>38</td>
</tr>
<tr>
<td>45</td>
</tr>
<tr>
<td>53</td>
</tr>
</tbody>
</table>

## REFLECTIONS

6. INTEGRATING THE FINDINGS
   6.1 Elements of Success
   6.2 Advances on Cross-Cutting Concepts: Momentum, Sustainability, Tipping Point
   6.3 Conclusions

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
</tr>
<tr>
<td>56</td>
</tr>
<tr>
<td>57</td>
</tr>
</tbody>
</table>

## APPENDIX A: BACKGROUND DOCUMENTS

## APPENDIX B: FIGURES AND TABLES
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFASPE</td>
<td>Agreement to Strengthen Public Health Actions in the States</td>
</tr>
<tr>
<td>AMP</td>
<td>Mexican Midwifery Association</td>
</tr>
<tr>
<td>APP</td>
<td>Association of Professional Midwives</td>
</tr>
<tr>
<td>CASA</td>
<td>Center for Adolescents of San Miguel de Allende</td>
</tr>
<tr>
<td>CAUSES</td>
<td>Universal Catalogue of Health Services of the Popular Health Insurance System</td>
</tr>
<tr>
<td>CIFRHS</td>
<td>Committee for Formation of Human Resources in Health, a joint commission of the Ministries of Education and of Health</td>
</tr>
<tr>
<td>CIMIgen</td>
<td>The Center for Maternal and Child Research, a private maternity clinic and training site</td>
</tr>
<tr>
<td>CNEGySR</td>
<td>National Center of Gender Equity and Reproductive Health, Ministry of Health</td>
</tr>
<tr>
<td>CNDH</td>
<td>National Human Rights Commission</td>
</tr>
<tr>
<td>COMLE</td>
<td>Mexican College of Nurse Practitioners</td>
</tr>
<tr>
<td>COMPECER, S.C.</td>
<td>Association for Competence and Certification</td>
</tr>
<tr>
<td>CONASA</td>
<td>National Health Council</td>
</tr>
<tr>
<td>CONACYT</td>
<td>National Science and Technology Council</td>
</tr>
<tr>
<td>CPE</td>
<td>Permanent Commission on Nursing, Ministry of Health</td>
</tr>
<tr>
<td>CPMS-M</td>
<td>Safe Motherhood Committee of Mexico</td>
</tr>
<tr>
<td>CSO</td>
<td>Civil society organization</td>
</tr>
<tr>
<td>DE</td>
<td>Directorate of Nursing, Ministry of Health</td>
</tr>
<tr>
<td>DGCES</td>
<td>Directorate General for Quality and Education in Health, Ministry of Health</td>
</tr>
<tr>
<td>DGPLADES</td>
<td>Directorate General for Planning and Development, Ministry of Health</td>
</tr>
<tr>
<td>EAC</td>
<td>Evaluation Advisory Committee</td>
</tr>
<tr>
<td>EBP or EBM</td>
<td>Evidence-based practices or Evidence-based medicine</td>
</tr>
<tr>
<td>EEP</td>
<td>Perinatal specialist nurse</td>
</tr>
<tr>
<td>EmONC</td>
<td>Emergency obstetric and neonatal care</td>
</tr>
<tr>
<td>ENDIREH</td>
<td>National Survey on Household Relationships Dynamics</td>
</tr>
<tr>
<td>ENEO</td>
<td>National School of Obstetric Nursing of the National Autonomous University of Mexico</td>
</tr>
<tr>
<td>ESEO</td>
<td>School of Obstetric Nursing of the National Polytechnic Institute</td>
</tr>
<tr>
<td>FEMCE</td>
<td>Mexican Federation of Nursing Colleges</td>
</tr>
<tr>
<td>GIIP</td>
<td>Inter-institutional Working Group</td>
</tr>
<tr>
<td>ICM</td>
<td>International Confederation of Midwives</td>
</tr>
<tr>
<td>IIE</td>
<td>Institute for International Education</td>
</tr>
<tr>
<td>INEGI</td>
<td>National Institute for Statistics and Geography</td>
</tr>
<tr>
<td>INI</td>
<td>National Indigenous Institute</td>
</tr>
<tr>
<td>INSAD</td>
<td>Research in Health and Demography, A.C.</td>
</tr>
<tr>
<td>INSP</td>
<td>National Public Health Institute</td>
</tr>
<tr>
<td>IPN</td>
<td>National Polytechnic Institute</td>
</tr>
<tr>
<td>LEO</td>
<td>Obstetric Nurse</td>
</tr>
<tr>
<td>LOME</td>
<td>Virtual mapping software</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MTDI</td>
<td>Office of Traditional Medicine and Intercultural Development, DGPLADES, Ministry of Health</td>
</tr>
</tbody>
</table>
**KEY CONCEPTS**

**Midwives**—The term *midwives* or *professional midwives* refers to non-medical personnel who attend births, often in addition to services in other phases of the continuum of care. It encompasses technical and nurse midwives.¹

**Nurse Midwives**—This term refers to nurses who attend births, even if they themselves do not identify as midwives. While this terminology is not widely accepted in Mexico, it is the most appropriate way to encompass all nurses (general, obstetric and perinatal specialists) who attend births and who, in many cases but not always, use midwifery practices in the obstetric care they provide.

**Policy and Normative Framework**—Norms, laws, policies and regulations that influence how professional midwifery is defined and practiced in the public health system, and the underlying attitudes and actions of decision-makers at the national and state levels who are responsible for design and implementation of maternal health policy.

**Recognition and Demand**—This section of the report looks at the actors and institutions working to influence the policy agenda, as well as levels of knowledge and factors that influence decision-makers’ perceptions of professional midwifery.

**Educational Programs**—Formal programs that train personnel to attend births in public healthcare institutions, including programs for obstetric nursing, perinatal specialist nursing, technical midwives, undergraduate university programs, and at baseline, autonomous midwifery training. Programs were excluded if, at the time of data collection, they did not require students to attend a minimum number of births in order to graduate.

**Deployment and Quality of Care**—The assessment looks at all public health care sites (clinics and hospitals) serving low- and mid-income women that employ professional midwives, as well as two private non-profit clinics that help to promote midwifery in the public system. Quality of care refers to technical and interpersonal competencies as well as organizational conditions of health service sites.

¹ A technical midwife is a graduate of a midwifery training school whose studies are recognized by the educational authorities and correspond to a technical (or post-secondary) degree.
Evidence-Based Practices—A list of 20 evidence-based practices was developed and used throughout the study. Seventeen of the 20 practices are recognized by WHO as essential components of women-centered care that contribute to higher quality health outcomes for both mother and child. Two of the remaining three practices consider respect for cultural differences, and the third reflects respect for women’s autonomy and decision-making during labor and childbirth.

Levels of Care—*Primary level* refers to primary health centers or clinics as well as maternity clinics with no surgical facilities. *Intermediate level* includes basic community level hospitals and specialized maternity clinics with operating facilities. *Secondary level* refers to general hospitals, and *tertiary level* corresponds to specialty hospitals.

Midwifery Model Sites—At baseline, the deployment sites that had an explicit focus on midwives providing evidence-based women-centered practices were defined as *integrated midwifery sites*. In 2018, such sites were called *midwifery model sites*.

Midwife Employment Sites—At baseline, a number of sites employed midwives without an explicit commitment to integrated midwifery as above. These sites were referred to as *isolated employment sites*. By 2018, there were sites that were intentionally focused on employing midwives, sometimes quite enthusiastically, but without a vision or model of care based on evidence-based women-centered practices. These sites are referred to as *midwife employment sites* because the emphasis is on employing midwives as a type of personnel who will be more sensitive to the women but may not actually provide a midwifery model of care.

Continuum of Care—The study used a working definition that includes prenatal, labor and delivery, and postpartum and newborn care. This differs from the ICM’s seven basic midwifery competencies, which are more comprehensive and include community and pre-gestational family health; prenatal, labor and delivery, postpartum, newborn, and infant care up to two months of age; as well as abortion care.3

---

**EXECUTIVE SUMMARY**

**INTRODUCTION:** In 2015, the MacArthur Foundation’s Population and Reproductive Health Program (PRH) launched a three-year Initiative to Promote Professional Midwifery in Mexico. Guided by a detailed Theory of Change and extensive consultation with diverse institutional partners, the Initiative invested $17 million through 50 grants to promote a more favorable legal and normative environment, strengthen recognition and demand, expand educational options, and promote integration of high-quality models of professional midwifery deployment in the public health system. The Initiative sought to create momentum toward a tipping point in which professional midwifery would eventually become a permanent feature of the maternal health care system to help reduce the burden of over-hospitalization for normal low-risk births, enhance quality of care, and contribute in the long run to

---


reducing high cesarean rates and improve health outcomes. Foundation grantmaking ended in 2018, though some projects will continue through mid-2019.

An external evaluation team worked closely with Foundation staff from the outset, employing a developmental evaluation approach to inform the Initiative as it unfolded. In 2015 and early 2016, initial data collection explored the landscape and gathered baseline information in four thematic areas: legal and normative framework; recognition and demand; education; deployment and quality of care. Seventeen indicators were later defined, providing a framework for evaluating progress in 2018. The assessment focuses on professional midwives (obstetric nurses, perinatal specialists, and technical midwives) who attend labor and delivery—often in addition to services in other phases of the continuum of care—in the public health care system. A list of 20 evidence-based practices was used to describe midwifery training and the quality of care provided by midwives and physicians. The following progress report looks at advances during the Initiative’s first two and a half years.

**SUMMARY OF FINDINGS:** Important advances have taken place since baseline to expand the presence of professional midwives providing high-quality obstetric and neonatal care as part of Mexico’s public health system. The potential for midwifery to become a permanent feature in the country’s public health system seems greater today because of the growing number of students, midwives and midwifery sites throughout the country; a larger and more influential community of midwifery proponents or champions; multiple collaborative efforts to disseminate information and sensitize health personnel to midwifery models of care; increased awareness and action by public authorities; and an emerging dialogue among innovative state-level actors about what works. These advances contribute to momentum around the country, with the most significant progress seen in locations where the Initiative’s four thematic areas, and the corresponding efforts of its partners, have converged.

In addition to confirming the importance of synergy among the four areas of support, as envisioned in the Theory of Change, the findings point to several factors or elements that may enhance success:

- A few states invested significant effort in preparing the terrain through sensitization of health care officials and medical personnel to foster greater acceptance of their midwifery programs. As a result, they encountered fewer difficulties related to referrals and collaboration with other providers. The Initiative recognized the importance of sensitization and supported numerous efforts to enhance acceptance among public officials and health system personnel in targeted states.

- The best maternal health outcomes are seen in integrated models where midwives are part of a larger team of practice with clear and complementary roles, and they are also best in primary and intermediate levels of care. In addition, the data show that quality of care is highest in midwifery sites where there is an enabling clinical setting, meaning committed leadership, commitment to evidence-based practices, good training, supportive staff, and continuing education. The Initiative did not prioritize a particular model of practice or health care level. Rather, it encouraged emerging models through support for learning, information exchange, and recognition of best practices.

- Mexico is a highly diverse nation both culturally and geographically. This diversity is marked, however, by extreme inequality of income and education linked to ethnicity, gender, and geography. In order for midwifery to be accepted in regions that need it most, this asset of diversity—in the context of inequality—needs to be honored by training diverse midwives who
are prepared to work where they are most needed. The Initiative recognized the importance of diversity and fostered this through grants to organizations representing multiple approaches and voices.

Extensive information is now available—more than in 2015—to inform or guide ongoing efforts to advance professional midwifery, and to encourage incoming state and national leaders to embrace midwifery as a key component of strategies to solve the country’s maternal health needs. In addition to generating enthusiasm, the information offers roadmaps and lessons learned about what does or does not work in the highly diverse contexts that characterize Mexico.

Midwifery proponents now have evidence that professional midwives are capable of providing high quality, woman-centered obstetric services throughout the continuum of care—including labor and delivery—when they are employed in supportive settings that embrace a midwifery model of practice and ensure prompt and fluid referrals in case of complications. This evidence is critical for overcoming the information gap that, at baseline, was slowing progress.

Professional midwifery is more likely to be viewed today as a potential solution to help satisfy Mexico’s need for high-quality obstetric care—especially in remote and impoverished settings. It appears most promising when certain elements are in place. If political will is lacking or inconsistent, if there are not enough qualified midwives, if physicians and other personnel are unsupportive, or women are unaware of midwifery services as an option, midwifery models of care may not realize their full potential. A few states provide examples of what can be accomplished when these components come together successfully.

Momentum is apparent, with state-level advances and expressed interest from the incoming government, marking progress toward broader integration of professional midwifery in official maternal health strategy. The Initiative contributed in important ways to this momentum by bringing professional midwifery into the conversation around maternal health in Mexico.

**FINDINGS BY THEMATIC AREA:**

**Legal and Normative Framework**—In three years, champions succeeded in moving professional midwifery from the fringes of maternal health strategy into the purview of key national policy-makers. Four health system agencies now acknowledge or have taken steps to advance professional midwifery in their programmatic frameworks or have introduced guidelines for maternal and neonatal care in which midwifery is implicit. This expanded interest has yet to produce new norms or policies around professional midwifery, and there is still much room to expand knowledge and understanding about models of practice and their potential contributions to improving maternal health outcomes. The advances are important, however, because they signal to other public officials and service providers that professional midwifery can be an effective and viable approach, setting the stage for more comprehensive policy-level change.

In addition to progress at the national level, 14 states—three more than in 2015—are implementing professional midwifery models of care. Their experiences feature distinct approaches and provide lessons for advancing midwifery in diverse contexts. Access to resources continues to be a concern for those trying to maintain or expand midwifery models of care.

For many actors, a national commitment or mandate accompanied by appropriate policies and budget resources is seen as highly advantageous to leverage the advances that have been made—new
knowledge and interest, unique methods, and documented impact—toward broader and more permanent integration of professional midwifery in Mexico’s public health system.

**Recognition and Demand**—Civil society midwifery proponents or champions, many of whom are Foundation grantees, play an important role in shaping the public agenda by expanding knowledge and information about professional midwifery. This network of actors is comprised of diverse interests often working collaboratively to document best practices, create and disseminate information, sensitize personnel, strengthen curriculum, and inform norms and regulations to facilitate midwifery practice.

At baseline, policymakers had very limited knowledge of midwives and what they could contribute to maternal and neonatal care, and less than half were familiar with the idea of professional midwifery. In 2018, largely as a result of the work of midwifery champions, the concept is more familiar to the maternal health policy makers who were interviewed, and in some cases is now part of their programmatic strategy. While differences of vision have made it difficult for midwifery proponents to articulate a common policy agenda, the sum total of information and technical resources they provide has changed the way that professional midwifery is understood today and may shape the policy choices of incoming health ministry officials nationally and in some states.

**Educational Programs**—Mexico has a greater number of accredited programs that train midwives to attend births in 2018, including new training opportunities in all four educational models: obstetric nursing, perinatal specialist nursing, technical midwives, and undergraduate university programs. With additional programs under development, the numbers are poised to grow further. While it will take several years before there are enough professional midwives to meet estimated demand in Mexico, progress since baseline has been considerable.

The number of midwifery students has increased three-fold, largely due to expanded training of obstetric nurses. The additional students present a challenge for programs as they compete for access to clinical practicum sites. This problem may diminish if new midwifery insertion sites are developed and health authorities begin to recognize the potential contributions of midwives to their statewide goals.

**Deployment and Quality of Care**—In just over two years, there are more midwives attending low risk births in more sites and more states than at baseline. Work and employment conditions for these midwives improved slightly but continue to be deficient and under-resourced. In addition, some sites continue to struggle with low productivity and difficulties related to referral of patients who develop complications.

Assessment of quality of care shows that a higher percentage of sites subscribe to a midwifery model, meaning they are supportive of evidence-based practices. The challenge is that almost half of the midwives who work in the public health system say they are not able to provide care according to those standards. Even fewer are able to do so in sites where they were hired without a comprehensive midwifery vision, especially at secondary and tertiary level institutions. Different kinds of midwives performed equally well in their use of evidence-based practices that conform to Mexican normativity and/or EBM throughout the continuum of care. There is room for improvement for midwives' knowledge in basic emergency obstetric and neonatal care. Women who received midwifery care expressed great satisfaction with the attention they received.
INTRODUCTION

1. SETTING THE STAGE FOR THE INITIATIVE

1.1 Background and Purpose

In 2015, when the Population and Reproductive Health Program (PRH) launched the Initiative to Promote Professional Midwifery, 96 percent of births in Mexico took place in hospitals, many of which were overburdened and underfunded. Doctors attended large numbers of uncomplicated deliveries using over-medicalized practices, contributing to cesarean section rates that were fourth highest in the world and second in Latin America. Mexico had lowered maternal mortality by 52% between 1990 and 2014 to a maternal mortality ratio (MMR) of 39 per 100,000 live births, but had not achieved its Millennium Development Goal of MMR 22. The MMR was even higher in poor states such as Durango, Chiapas, Hidalgo, Guerrero and Oaxaca. 

A 2014 State of the World’s Midwifery report by the United Nations Population Fund (UNFPA) and the International Confederation of Midwives (ICM) estimated that Mexico met only 61 percent of workforce demand for maternal health professionals. The report found 78 professional midwives in Mexico and recommended greater investment in this area.

Midwifery is not new to Mexico, having originated in a centuries-old practice of “traditional” midwifery that is widespread still today in some parts of the country. Professional midwifery has had a more sporadic presence. Obstetric nurse and midwife training programs emerged in the 1940s but, by 1968, most of these specialized programs had been replaced by undergraduate programs in general nursing.

A risk-assessment approach to maternal health became prevalent in 1987 with the Safe Motherhood Initiative’s focus on reducing maternal mortality, and, by the late 1990s, emergency obstetric care became the preferred approach to reducing maternal mortality. In the early 2000s, Mexico mandated that all babies be delivered in hospitals where emergency care was supposedly available as a strategy to achieve the country’s Millennium Development Goal of MMR 22 by 2015.

While this shift was taking place, a new option for professional midwifery began to emerge as a potential alternative in maternal care. In 1994, a private post-secondary school midwifery program known as CASA opened in Guanajuato to train young women from rural, indigenous communities in women-centered birthing practices. CASA became the first accredited technical midwifery school in Mexico in 1997. Technical midwives were recognized in the public health system with a specific job code in 2011, although their acceptance by other personnel was inconsistent at best.

---


7 Centro de Atención para la Salud de la Adolescente [http://casa.org.mx/en/].
In the years to follow, maternal health advocates turned their attention to eliminating obstetric violence\(^8\) and the need for a “humanized” or “respectful birth” approach, along with greater emphasis on quality throughout the entire continuum of obstetric care. This more comprehensive approach is considered incompatible with attending normal births in hospitals, signaling the need for new strategies to achieve quality maternal health care for all Mexican women.

With these challenges in mind, the Foundation’s PRH team, in concert with a wide array of allies, perceived that the time was ripe for expanding the role of skilled midwives and returning to a focus on primary healthcare for uncomplicated births, with swift and reliable backup care close at hand. A transition of this nature would be reinforced by global efforts to advance professional midwifery as a means to ensure high quality obstetric care for all women, as promoted by the World Health Organization (WHO), the Pan American Health Organization (PAHO) and the United Nations Population Fund (UNFPA), the last two of which have an important presence in Mexico.

In 2015, the Foundation launched a capstone Initiative to Promote Professional Midwifery, the culmination of more than 20 years of grant making in the field of population, reproductive health and maternal health. A baseline evaluation provided information to orient strategic grant making over the next three years. The present report captures changes that occurred as the Initiative unfolded up until 2018. Grant activities will continue into mid-2019.

1.2 Contextual Developments since Baseline

The rate of hospital births continued to rise in 2016 to a national average of 98\(^9\), intensifying the burden on underfunded public hospitals. After several years of growth, the Popular Insurance (Seguro Popular) program received less funding in 2017 and 2018 as a result of overall cuts in national government spending. These reductions, coupled with problems of corruption and inefficiencies, exacerbated shortages in human and material resources in health facilities.

At the completion of the Millennium Development Goals (MDG) in 2015, the only goal that Mexico had not achieved was the reduction of the maternal mortality ratio to 22 per 100,000 live births. The new Sustainable Development Goals (SDG) do not include a specific maternal mortality reduction target and, as a result, vigilance from national health authorities seems to have diminished.

The concept of obstetric violence—a broad category that includes mistreatment at birth as well as overly medicalized care, medical negligence and/or denial of obstetric care—has been a growing concern for human rights oversight bodies, organizations promoting women’s sexual and reproductive rights, state legislatures, and some federal agencies in Mexico. For the first time, in 2016, an official national survey on household dynamics (ENDIREH) included questions on obstetric care. The results showed that one of every three women who had given birth in the previous five years reported having suffered one or more forms of mistreatment during birth care; the figure was even higher for women who had given birth in public hospitals (INEGI, 2017).\(^{10}\) In July 2017, the National Commission on Human Rights (CNDH) recognized the magnitude of the problem and issued a General Recommendation to the entire Mexican health sector to eradicate obstetric violence from institutional birth care. Increased

---

\(^{8}\) WHO, FIGO and other agencies recognize this as “mistreatment and lack of respect”. In Latin America, the concept of obstetric violence has become prevalent in the last decade.

\(^{9}\) See the official MDG/Mexican government webpage for the latest figures (2016) on percentages of births attended by skilled health personnel [http://www.objetivosdedesarrollodelmilenio.org.mx](http://www.objetivosdedesarrollodelmilenio.org.mx).

awareness of this problem has been accompanied by concern about substandard quality of obstetric care services more generally.

Quality of care remains one of the major problems affecting the Mexican health system. In 2016, the Organization of Economic Cooperation and Development (OECD) called for a major overhaul of the system to achieve greater investment and spending in health, enhance regulatory and oversight functions within the system, develop national standards and guidelines for care, shift focus to patient-centered care, strengthen primary health care, and overcome the fragmented nature of service delivery. These recommendations are all pertinent for improving maternal and newborn health and are consistent with a midwifery model of care.

In July 2018, just after data capture, Mexico elected a new president, national legislature, and governors in nine states. In addition to unknown challenges, this changing political context offers an opportunity for structural change in the public health system to improve the quality of maternal and newborn health and, possibly, to promote the midwifery model.

THEORY OF CHANGE

2. CONTRIBUTING TO THE SOLUTION: INITIATIVE TO PROMOTE PROFESSIONAL MIDWIFERY

2.1 Evolution of the Theory of Change 2015-2018

a. The original vision

The Initiative to Promote Professional Midwifery in Mexico’s public health system is guided by a multidimensional Theory of Change developed in consultation with external partners and informed by the Foundation’s decades-long experience working on population and reproductive health in Mexico.

The long-term goals of the Theory of Change include maternal care that is higher quality, more women-centered, and lower cost. The Foundation expected that, over the long run, such enhanced services would contribute to reducing maternal mortality and morbidity. Given the long-term nature of such a process, PRH staff hoped the Initiative’s efforts between 2015 and 2019 would create momentum toward a “tipping point” where progress is unlikely to be reversed and the efforts of diverse actors to ensure long-term institutionalization of high-quality professional midwifery become sustainable.

The following objectives were proposed as necessary for professional midwifery to be institutionalized in Mexico’s public health system:

- A favorable policy and legal framework and funding for midwifery as well as demand from policymakers and women
- Collaborative and effective midwifery champions to help generate and sustain recognition and demand among decision-makers and women and their families for midwifery services
- More diverse educational options through training schools and programs with sufficient public funding, where needed, to supply the kind and number of midwives necessary to meet the country’s needs

• More employment sites that allow midwives to practice high-quality women-centered midwifery practices.

Grants awarded between 2015 and 2018 in each of these four areas sought to enable primary boundary partners (stakeholders directly influenced or targeted by grant making activities) to take necessary steps to influence secondary boundary partners (policymakers and other key actors) to take action toward the desired outcomes.12

In general terms, the Theory of Change states that by promoting enhanced training of professional midwives, together with fostering a more favorable policy environment, it would be possible to achieve greater availability of professional midwifery services in the health system. The vision hypothesizes that if relevant national and state officials learn about and understand the virtues of professional midwifery, they would become motivated to promote changes in policy, norms and mandates that are favorable to midwifery. (A complete diagram of the Theory of Change can be found in Exhibit 1 Appendix A, along with a list of the underlying assumptions in Exhibit 1a.)

Since policymakers at times need nudging from civil society advocates, the Theory of Change proposed to strengthen the capacities of these champions to influence the policy agenda, working in tandem with public decision-makers where possible.

Another central thesis of the Theory of Change was that well-documented examples of successful midwifery practice, once disseminated, could support efforts to replicate those experiences. These experiences would feature high-quality, women-centered evidence-based care by professional midwives. It was expected that health care planners and authorities would realize the potential for professional midwifery as a high-quality, cost-effective way to meet the country’s pressing obstetric and neonatal care needs.

b. Baseline analysis of Theory of Change

The Theory of Change was found, in 2015, to be comprehensive and well-conceived, with a focus on four large dimensions that allowed the Initiative to take advantage of emerging opportunities and channel support toward clusters of activity in diverse contexts. Baseline findings suggested a need to clarify the concept of institutionalization, however, to better understand how to establish enabling conditions for

---

high quality women-centered care provided by midwives, overcome resistance by other health care providers, and resolve bureaucratic bottlenecks in the health system.

Changes in the structure and orientation of the healthcare system were needed to achieve institutionalization of professional midwifery. While fundamental changes of this nature would be unlikely in 2017 and 2018, just prior to a major national election, midwifery advocates would have opportunities to position their priorities or agendas with incoming officials. In order to do so effectively, efforts were needed to overcome tensions and encourage collaboration among diverse types of professional midwives to help them have a clearer message and unified voice in advocating for systemic change.

The data further showed that poor labor conditions for midwives were widespread and might be a deterrent to stimulating interest among potential students, a key component of expanding the supply of trained midwives. Greater attention to employment conditions would be needed to address this challenge.

Finally, the fact that pregnant women have little choice on where to deliver their babies contradicted the idea of client demand that the Theory of Change had posited as important for expanding midwifery services.

c. Strategic adjustments after baseline

Baseline results thus supported the overall Theory of Change and suggested the need to increase enrollments, strengthen labor conditions, and improve insertion settings through state-level work and scholarships for midwifery students. Accordingly, the Initiative placed greater emphasis on state-level policy makers who are able to improve enabling conditions for institutionalized midwifery.

Discourse around midwifery at baseline highlighted the distinction between supporting midwives as a type of personnel and an alternative approach that encourages a “midwifery model” of care that is woman-centered and grounded in evidence-based practices. The Theory of Change initially made the assumption that competent midwives would provide high-quality care. But as grant making was rolled out between 2016 and 2018, PRH staff and their partners increasingly saw the need for emphasis on women and the kind of care they receive, rather than on the midwife as the main protagonist.

A third strategy modification emerged as the Foundation looked for ways to support a diverse but inclusive community of actors capable of advancing common objectives. With the country’s leading organization of midwives still working to overcome internal tensions, the Initiative broadened its approach to include additional groups or coalitions of midwives with the hope that they would find ways to collaborate around shared interests.
Given the short time period planned for the Initiative, PRH staff made additional grants to help partners become financially sustainable, while reaching out to enhance the interest of potential new donors.

d. How the Theory of Change played out in 2018

As will be seen in the results section, the Initiative fostered change in all four thematic areas, and it is expected that the sum of these efforts will create momentum toward a tipping point in the coming years. The evaluation results, detailed in Section 5, show many of the Theory of Change’s underlying assumptions to be totally or partially correct:

The explicit assumption that reliance on highly qualified midwives will lead to higher quality, more women-centered, lower cost maternal and neonatal care (I) is partially true. Midwives are most able to provide high quality, women-centered care when they are employed in settings that prioritize “midwifery practices” and allow midwives autonomy, ideally within a team of professional midwives and supportive medical personnel. Data generated by a parallel but independent study supported by the Foundation confirms that midwifery care is less expensive than care provided by physicians.13

It is too early to know whether another explicit assumption, that improved access to quality of care will contribute to sustained decrease in maternal mortality and morbidity in Mexico (ii), will indeed prove correct. However, in order to make a visible difference in terms of state-level or national-level MMRs, the country would need a large number of midwives trained and optimally deployed. In 2018, there are more midwives trained and deployed, but they are attending fewer low risk births than they say they can attend and certainly fewer than the 175 births that the WHO estimates a professional midwife can attend per year.14

Four interrelated assumptions that are central to the Theory of Change were partially confirmed:

- Decision and policy makers lack information and that by providing such information they will be able to make the needed changes (iii)
- Collaboration and/or pressure from civil society will encourage politicians to fulfill their promises (iv)
- Champions will provide the kind of data and messages that are relevant and needed to change the attitudes of their target audiences, provide input and technical guidance and generally help move those actors into action (vi)
- Midwifery advocates can work together or in support of each other promote midwifery in coordinated and coherent ways (vii)

The data confirm that—despite persistent internal tensions among different types of midwives and their advocates—champions provided information that raised awareness among federal and state decision makers, influencing many of those individuals to become more favorably disposed to professional midwifery. In states where there was a convergence of advocates focused on promoting professional midwifery, the data showed deeper levels of political commitment and action.

The assumption that newly informed government officials, specifically in the Ministries of Health and Finance, would make necessary budget adjustments to hire midwives (v) did not prove correct. This is

likely due to decreasing maternal health budgets and tepid or uneven commitment within the agencies that could push for such allocations. Some discretionary funding was available, but significant and sustained allocations are unlikely without a broader public policy commitment to advance professional midwifery.

There continues to be disagreement around whether or not a competency-based certification system is needed to demonstrate and ensure the proficiency of skilled midwives (ix). There were more education programs and more midwives being employed in 2018 even without a widely-accepted certification mechanism. But, given ongoing skepticism among some observers and health care providers, it is likely that a certification system—acceptable to a wide range of actors—would contribute to expanding legitimacy and support for midwives who can demonstrate their skills once on the job.

For an increase in the number of licensed midwives deployed in the health system to fill the gap of human resources for health and improve the availability and quality of maternal and reproductive health care (x), a key assumption of the Theory of Change, midwives need to work in settings that are designed to support them and avoid unnecessary risks to the women and children they attend. Persistent problems continue to plague even some of the best employment sites, thus limiting the potential of professional midwives to address and fill the gap as proposed and desired by midwifery champions within and outside of the Health Ministry.

Informal conversations with traditional midwives suggest that they have concerns about the rise of professional midwifery in Mexico. However, formal data were not collected on this issue. Some grants were directed at smoothing the interface between traditional and professional midwives and are expected to support the assumption that traditional midwives will not oppose, but will learn to work together with, professional or licensed midwives (xi).

In 2018, there appears to be an increasing predominance of obstetric nurses who will become professional midwives, and fewer technical midwives. Nevertheless, data show that state-level officials confirm the assumption that greater diversity in the training programs is needed to meet the multiple and differential needs of the country in maternal healthcare (xii). Those officials claim they cannot find enough midwives in their states or who are willing to work in their states and thus, in many cases, are trying to initiate state-level educational programs.

Finally, the assumption that reproductive age women and their families will learn about and demand midwifery services (xiii) has yet to be confirmed. Evidence shows that women do prefer care by midwives. Most report that they hope to use the same midwife again in the future, and it can be expected that they will spread the word among friends. However, it is too soon to know whether broader groups of women will learn about the option of professional midwifery in public health care services and will demand or actively seek such services in the future.
2.2 Indicators

In October 2017, the complete evaluation team, including the external evaluators and representatives of the Foundation’s PRH and Evaluation teams in Mexico and Chicago, met to define indicators for measuring the Initiative’s progress and success. A total of 17 objective-specific indicators and three cross-cutting dimensions were agreed upon, providing a framework for the 2018 evaluation and the presentation of findings in this report.

INDICATORS:

<table>
<thead>
<tr>
<th>Legal &amp; Policy Framework</th>
<th>Recognition &amp; Demand</th>
<th>Education</th>
<th>Employment &amp; Quality of Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy proposals are developed, presented and discussed among diverse actors</td>
<td>Diversity, density and strength of pro-midwifery networks, including among midwives</td>
<td>New and/or strengthened programs that respond to diverse needs</td>
<td>Description of midwives who attend births employed in the public health system</td>
</tr>
<tr>
<td>States make policy or normative changes to incorporate high quality midwifery practices</td>
<td>Key players agree on model(s) of care that describe the roles of midwives and how they should be hired</td>
<td>Students enrolled, graduated and/or licensed</td>
<td>Description of deployment sites including use of high quality midwifery practices and quality of program</td>
</tr>
<tr>
<td>A federal agency takes action to institutionalize professional midwifery as a solution to maternal health concerns</td>
<td>Knowledge and support for midwifery among decision makers, health system officials, women, families, and communities</td>
<td>Agreement/adherence to core competencies in curricula and classroom instruction</td>
<td>Compliance by midwives with evidence-based practices</td>
</tr>
<tr>
<td>Resources allocated to fund a professional midwifery training and/or deployment program</td>
<td>Interest and action among state actors to document and disseminate examples of high quality midwifery practice</td>
<td>Clinical sites that allow students to adhere to evidence-based practices</td>
<td>Women’s level of satisfaction with care provided by midwives</td>
</tr>
</tbody>
</table>

CROSS-CUTTING DIMENSIONS

- **Momentum**—Has the pace of progress towards institutionalization increased?
- **Sustainability**—Are resources and support adequate to ensure continuation?
- **Tipping point**—Have the advances reached a point of no return with reversal unlikely?
3. IMPLEMENTING THE VISION

3.1 Grant Making Portfolio

The Foundation’s grant making portfolio (Exhibit 2, Appendix A) to advance professional midwifery in Mexico surpassed 17 million dollars with fifty grants (including renewals) awarded. Sixty-four percent of the grants were awarded in 2016 and 2017 (with equal numbers in each of those years). Of those, 38% continue until mid-2019 and the rest end before or in December 2018. The grants reflect four areas of concern and their corresponding objectives, as defined in the Theory of Change.

<table>
<thead>
<tr>
<th>Number of grants:</th>
<th>Total investment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grants awarded as of 7/16</td>
<td>23</td>
</tr>
<tr>
<td>Grants awarded between 10/16 and 7/18</td>
<td>27</td>
</tr>
<tr>
<td>Total investment</td>
<td>50</td>
</tr>
</tbody>
</table>

During the period covered in this report, the Initiative’s largest area of investment was recognition and demand, with $5,928,200 in total spending and 25 grants, reflecting a commitment to fostering broader understanding and more informed dialogue around professional midwifery. This was followed by $4,268,800 (13 grants) for deployment of midwives in diverse and innovative practical settings with an emphasis on ensuring quality of care. The Initiative dedicated $3,862,000 (13 grants) to strengthening educational options for midwives, intent on expanding the availability of highly qualified professional birth attendants. Finally, $3,061,000 was invested through 10 grants to strengthen the policy and regulatory environment for professional midwifery by enabling champions to document success, propose solutions, and more effectively engage with decision-makers. (Specific objectives in each of these four areas are described in the Findings sections of this report.)

3.2 Networking Strategies

In addition to the grant portfolio, a working group—the GIIP—was formed of institutions interested in advancing various aspects of midwifery, including representatives of Health Ministry agencies as well as international and national organizations and networks. Participants envisioned the GIIP as a mechanism to foster collaboration, undertake advocacy and political dialogue, generate information and build capacity. GIIP members identified the states of Oaxaca, Morelos, Hidalgo and Tlaxcala as the foci of their collaboration and information-sharing efforts. The working group’s vision and strategic objectives complemented those of the Initiative.

Grants to three working group member organizations (UNFPA, PAHO, and CPMSM) supported activities that reflected the value of the often-intense strategy discussions and broad inter-sectorial collaboration. In 2018, the CNEGySR, a key Health Ministry agency in charge of maternal health, took over coordination of the GIIP, a demonstration of its strategic importance for promoting governmental acceptance of professional midwifery.

In addition to sustained outreach and networking with grantees, the Foundation held five grantee

15 Members include the CNEGySR (also referred to as the Center)—the National Center for Gender Equity and Reproductive Health of the Ministry of Health, UNFPA, PAHO, MacArthur Foundation, Kellogg Foundation, and the National Safe Motherhood Committee.
meetings between 2014 and 2018 for the purpose of fostering networking while gaining guidance and insights from partners. The 2014 meeting helped the Foundation define the four pillars of its strategy as well as three and five-year goals. Participants emphasized the importance of having a strong communication strategy and provided ideas for coordinating activities by circulating grant summaries and creating a collective calendar. The 2015 grantee meeting focused discussion on pathways to certification. Ideas for how to improve networking were also presented, leading to development of an Internet-based networking platform the following year. In 2016, the annual meeting allowed grantees to share their advances, giving everyone a sense of their collective progress. The 2017 meeting, co-convened with the Safe Motherhood Committee and the Maternal Mortality Observatory, again provided a forum for grantees to share their work and deepen their networking. In 2018, the grantee meeting was held in conjunction with a technical secretariat meeting of the Safe Motherhood Committee of Mexico. This joint meeting created important new channels for dialogue and interaction among grantees and state policy makers promoting or interested in integrating professional midwifery models in their states.

METHODS

4. MEASURING CHANGES SINCE BASELINE

This report of changes since baseline begins with a description of methodology, followed by findings in the four areas of legal and policy framework, recognition and demand, education, and employment and quality of care. In each area, major findings are first summarized and then presented for each indicator.

4.1 Methodology

Employing a developmental evaluation approach, the methodology evolved as the Initiative unfolded. In August 2015, the evaluators conducted preliminary open-ended interviews with 20 key informants. The interviews covered each of the thematic areas prioritized by the Initiative. An Evaluation Advisory Committee (EAC) comprised of 17 experts in maternal and neonatal care and midwifery in Mexico provided thoughtful feedback on specific evaluation questions. (See Exhibit 3 in Appendix A for the evaluation questions, Exhibit 4 for the names of EAC committee members.)

Based on this input and extensive research to identify schools, employment sites, policies and activist organizations, the evaluators designed semi-structured questionnaires and survey instruments to collect quantitative and qualitative data from each type of actor. A data collection sheet and a checklist of infrastructure, material and human resources were developed to capture institutional statistics at each educational and employment site. Between August 2015 and February 2016, data were collected from 327 people in 12 states including Mexico City.

Over a year after the baseline data collection, on April 24, 2017, the Evaluation Advisory Committee was convened to review progress since baseline, including new schools and deployment sites as well as political developments. By the time 2018 data collection began, 10 sites had been awarded sub-grants through a competition supported by the Foundation. The evaluators visited each of the sites that had initiated project activities even though in some cases the activities were incipient.

Data collection in 2018 emphasized assessment of progress towards the specific indicators. As with baseline, interviews were designed for each type of boundary partner. The exception were physicians,
who were interviewed only in 2015. The same data collection sheet was used for capturing institutional statistics at employment sites and a checklist of each institution’s infrastructure and material and human resources. Between February 1 and June 30, 2018, data were collected from 401 people in 18 states (Table 1, Appendix B).

Evidence-based practices were assessed at both data collection points. For the 2018 data collection, two practices were eliminated from the list that were no longer significantly practiced anywhere in the country, and two others were added at the suggestion of the evaluation advisors. Thus, while in 2018 data report on the complete list of practices used in 2018, the comparison between baseline and in 2018 includes only those that are the same in 2015 and 2018.

<table>
<thead>
<tr>
<th>Evidence-based practices (EBPs) used during baseline and in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Choice of person to accompany</td>
</tr>
<tr>
<td>• Avoid routine use of IV</td>
</tr>
<tr>
<td>• Woman uses her own clothes</td>
</tr>
<tr>
<td>• Avoid oxytocin during labor</td>
</tr>
<tr>
<td>• Autonomous decision-making</td>
</tr>
<tr>
<td>• Avoid routine external rupture of membranes</td>
</tr>
<tr>
<td>• Freedom to walk and move about</td>
</tr>
<tr>
<td>• Consumption of liquids</td>
</tr>
<tr>
<td>• Consumption of foods</td>
</tr>
<tr>
<td>• Woman decides in what position to give birth</td>
</tr>
<tr>
<td>• Avoid routine episiotomy</td>
</tr>
<tr>
<td>• Avoid Kristeller maneuver</td>
</tr>
<tr>
<td>• Immediate skin-to-skin contact</td>
</tr>
<tr>
<td>• Delayed cutting of umbilical cord</td>
</tr>
<tr>
<td>• Avoid manual exploration of uterine cavity without anesthesia</td>
</tr>
<tr>
<td>• Avoid routine or prophylactic use of antibiotics in newborn</td>
</tr>
<tr>
<td>• Avoid nose and mouth aspiration of newborn</td>
</tr>
<tr>
<td>• Respect for cultural practices (use of amulets, handling of the placenta, etc.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EBPs added in 2018</th>
<th>EBPs eliminated in 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check placenta for completeness</td>
<td>Avoid enema</td>
</tr>
<tr>
<td>Use partograph</td>
<td>Avoid pubic shaving</td>
</tr>
</tbody>
</table>

At baseline and in 2018, informants were assured that their comments would be kept confidential. All informants consented to being included in the list of collaborators (Exhibit 5, Appendix A).

Between February and May 2016, all baseline data were entered into Excel® databases and quantitative data were transferred to SPSS®. The 2018 data from directors of employment sites, midwives and women service users were captured directly in Qualtrics® survey software during the months of February and July. Frequency distributions and cross tabulation analyses were carried out in SPSS® for the quantitative data. Data from interviews with national and state officials, at baseline and in 2018, were recorded (with prior permission) and some were transcribed verbatim, and where possible entered into Qualtrics®. Longer texts were coded into basic response categories. Quotes from these transcripts and from open-ended questions in the semi-structured interviews illustrate key points in the report.
4.2 Methodological Limitations

**Governmental Actors**—Interviews with national and state-level officials focused, among other topics, on their perceptions of midwifery and various types of midwives. In 2018, it was apparent that many officials had read the baseline report and therefore knew the pro-midwifery perspective of the Initiative. It was difficult to discern whether or how this affected their responses but may have influenced some to speak more positively about midwifery than they might have otherwise.

**Midwifery Champions**—The universe of actors interviewed at baseline and in 2018 overlaps significantly with the Foundation’s circle of grantees and collaborators, meaning these individuals are at the same time protagonists and informants. This self-referential loop was unavoidable because the PRH program was a principal source of support in the field. To the extent possible, midwifery proponents outside the Foundation’s circle of relationships were included and their perspectives taken into account.

**Education**—Some data was not available at the time of the 2018 data collection, for example, for some 19 affiliates of the National Autonomous University's obstetric nursing program (ENEO) who may or may not be currently training in birth attendance. In addition, the information presented is based on the practices and characteristics reported by educational program directors without independently confirming them through student interviews or curriculum analyses.

**Employment and Quality of Care**—Data on quality of care are based on self-reporting by midwives or women clients, not on actual observation of practices, possibly resulting in over-reporting of evidence-based practices performed and underreporting of practices that should be avoided. In addition, due to time constraints, it was not always possible to interview midwives who worked weekend or night shifts. Follow-up phone calls were attempted after some site visits with mixed results. Five women service users were interviewed per site wherever possible, a number deemed adequate and more realistic given difficulties encountered at baseline.

## RESULTS

### 5. CHANGES SINCE BASELINE

#### 5.1. Legal and Normative Framework

The Theory of Change recognizes that in order to achieve “lasting institutionalization of professional midwifery in the health care system, a favorable policy environment is needed, along with increasing availability of and demand for midwifery services, midwifery champions, and resources from the state to support training programs and schools.” The Initiative’s guiding objective was to support diverse actors as they promote favorable norms and policies and their application. During implementation, the strategy prioritized actions to create an enabling policy environment for professional midwifery with support for research, information sharing and advocacy.

---

Objective: Promote favorable norms and policies and their application

Total spent: $3,061,000
Grants at baseline (6): $1,786,000
Grants since baseline (4): $1,275,000
Grant support:
  o To help midwifery proponents gain or strengthen technical skills in leadership and advocacy
  o To showcase work being done in Mexico through participation of midwifery champions at international forums
  o For research to inform policymakers of women’s perceptions about the quality of maternal care they have received by different types of providers
  o For efforts to describe potential midwifery models of care
  o For efforts to coalesce the movement of key actors in forums such as the GIIP

Specific methodology

At baseline, the evaluation team documented the framework that governs midwifery—from international agreements and norms to Mexico’s Constitution and National Health Law, specific norms and codes of practice, and state-specific initiatives. Forty-seven national and state public officials were asked what laws and norms support or hinder the institutionalization of midwifery in the public health system and what is needed to move forward. The 2018 evaluation looked for changes in the legal, normative and policy framework as it pertains to midwifery, speaking with 86 informants, including an expanded number of state-level authorities.

Summary of findings

In 2015, the baseline assessment found that Mexico’s legal framework allowed midwives (obstetric nurses, technical midwives and trained traditional midwives) to work in the public health system but said nothing about where they should work or what role they should play vis-à-vis other health care providers. The Health Ministry had employment codes for obstetric nurses and technical midwives, making it possible to employ those with professional credentials in the public health system. In April 2016, the newly published Official Norm 007—the country’s most important standard relating to maternal and perinatal health—mentioned midwives for the first time as qualified providers for low-risk births. Limited resources were available to states, particularly those with high maternal mortality rates, to hire midwives, although only a few states requested funds.

Notwithstanding these advances, midwives had difficulty finding a place in the health system due to commonly held misperceptions about their ability to provide quality care and a lack of guidelines for implementing midwifery models of care. Midwives depended on the support or initiative of a few key leaders or directors in order to practice, making them vulnerable to changes in policy or leadership. Health officials interested in promoting midwifery had to find their own way to operationalize the

---

17 Grant totals shown here include number of grants whose primary objective was in this area, although total amounts expended include grants whose secondary objectives were in the specific area.
practice of midwifery, usually fighting rigid regulatory requirements or resistance from unconvinced personnel.

The baseline evaluation found that the normative framework supported many evidence-based practices that characterize a midwifery model of care but inconsistencies with regard to standard practice left room for interpretation and resulted in much variation at the clinical level. Consistency and clarity around evidence-based practices is important for quality of care in general but is particularly important for legitimizing certain aspects of midwifery practice. Oversight and implementation of the norms posed a related challenge, contributing to discrepancy between often favorable opinions of high level policymakers and a less favorable reality on the ground (see Exhibit 6, Appendix A).

These baseline findings highlighted the need for a high-level policy mandate to reframe midwifery as a key component of an evidence-based model of care, not merely a type of service provider—and operational guidelines for incorporating professional midwives into diverse care settings. At the same time, actions were needed to build understanding and confidence by showcasing successful experiences already underway. 

In 2018, proponents have succeeded in moving professional midwifery from the fringes of maternal health strategy into the purview of national policy-makers. Four health system agencies acknowledge or have taken steps to advance midwifery in their programmatic frameworks, or have introduced guidelines for maternal and neonatal care in which midwifery is implicit. This expanded interest has yet to produce new norms or policies around professional midwifery, and there is still much room to expand knowledge and understanding about models of practice and their potential contributions to improving maternal health outcomes. The advances are important, however, because they signal to other public officials and service providers that midwifery can be an effective and viable approach, setting the stage for more comprehensive policy-level change.

In addition to progress at the national level, 14 states—three more than in 2015—are implementing professional midwifery models of care. Their experiences feature distinct approaches and provide important lessons for advancing professional midwifery in diverse contexts.

Access to public resources continues to be a concern for those trying to maintain or expand midwifery experiences, as is a desire for greater leadership from the federal level. For many national and state actors, a national commitment or mandate, accompanied by appropriate policies and budget resources, is now needed to leverage the advances that have been made—new knowledge and interest, unique methods, and documented impact—toward broader and more permanent integration of professional midwifery in Mexico’s public health system.

**Indicator 1:**
Policy proposals are developed, presented and discussed among diverse actors

**Finding:**
Midwifery proponents or champions are providing information and technical support in ways that are helping to define policy priorities, although they have not yet presented concrete policy proposals.

The July 2018 national elections in Mexico shaped the political context during the last year of the Midwifery Initiative by limiting possibilities for significant change with the outgoing government but offering opportunity to position a robust and well-developed midwifery agenda with incoming national and state government leaders. In this context, while midwifery champions did not develop or present
policy reform proposals, data show multiple contributions to improving current policy and practice, as well as dialogue and convergence intended to inform the emerging health policy agenda. Efforts mentioned by various sources include:

- In the area of midwifery education, champions outside of government worked closely with Health Ministry officials in two agencies to build understanding of professional midwives’ competencies, improve curriculum and open spaces for midwifery at state universities. Their work was aimed at creating a virtual toolbox for midwifery educators and a core curriculum based on ICM competencies, both potentially important resources for policy makers, regulatory authorities and educators.

- Several groups worked to raise awareness among medical personnel and state health authorities. For example, one organization launched a 10-hour e-learning course, available on the PAHO virtual campus, as a way to sensitize medical personnel to the values and basic principles of midwifery. The group worked closely with the Health Ministry’s education agency to gain their endorsement and was invited to present the course to their training directors for use with all health professionals. In Veracruz, the state Health Ministry required all personnel to take the course, resulting in more than 2,200 participants from that state alone. Similar sensitization and training efforts by other organizations reached hundreds of medical personnel and health authorities in other states, including Morelos and Guerrero.

- Efforts to prepare for the presidential transition and shape the emerging policy agenda included:
  - A forum entitled “¿Lo que les preocupa los ocupa?” (Do your concerns guide your actions?) brought together representatives of presidential candidates to discuss midwifery and other maternal health priorities. Following the forum, senior staff representing the new president requested and received from midwifery champions a document explaining why and how to incorporate professional midwifery in the public health system.
  - The 2018 annual meeting of a key maternal health coalition, which convened diverse actors to discuss the challenges of securing resources for midwifery models of care. Participants were concerned that resources from Seguro Popular’s Anexo 4, available to all states, do not include professional midwifery services as an allowable expense, and that the important AFASPE mechanism (resources allocated by the CNE GySR for maternal health initiatives) was limited in size and scope. The meeting drew unprecedented participation from state and national health ministry officials, other federal agencies, national and state civil society organizations, and multilateral institutions. As a result of the dialogue, participants agreed to position the topic as a priority before presidential candidates and their advisors with concrete recommendations for moving forward.18

<table>
<thead>
<tr>
<th><strong>Indicator 2:</strong></th>
<th><strong>Finding:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>At least one federal health agency commits to, and takes action toward, institutionalizing professional midwifery as a solution to maternal health concerns</td>
<td>Three federal agencies have shown expanded interest in or taken action to strengthen professional midwifery, and a fourth introduced a new model of care in which midwifery practice is implicit.</td>
</tr>
</tbody>
</table>

---

**CNEGySR**—Mexico’s most important normative agency for maternal health participated in the GIIP and contributed to discussions of a midwifery agenda even before baseline, and since 2015 has expanded efforts to encourage and enable state Health Ministries to contract professional midwives. CNEGySR played a leading role in the development of professional midwifery programs in states like Tlaxcala and gave technical and financial support to multiple states.\(^{19}\)

In 2017, the CNEGySR took a first step toward incorporating midwifery into its formal commitments by developing a Model for Professional Midwifery Services. An executive summary of the model, presented to midwifery and public health system allies in draft form, acknowledges the legal underpinnings and body of research that supports professional midwifery with emphasis on the potential contributions of midwifery services in the continuum of care. The model was lauded for expanding understanding of professional midwifery services as a concept and for incorporating nurses as key providers. It was not published before the pre-electoral moratorium began in April, but may represent an important conceptual body of work for future Health Ministry officials.

The Model for Professional Midwifery Services, with its emphasis on obstetric and perinatal nurses, who they view as qualified, existing providers, and on the concept of midwifery services rather than a new category of provider, was welcomed by other Health Ministry actors who were previously uneasy with the idea of creating a new profession.

Actors within and outside the Health Ministry recognize the significance of the model, although several believe it does not go far enough in terms of operational specificity, defining appropriate labor codes, or recognizing birth care and women’s autonomy as central aspects of midwifery services.

> The operationalization is what I would have liked to see... something more detailed; it is very general. (federal official)

> It is very conceptual, but that may be okay for a first step so that [we know] what we're talking about when we speak of professional midwifery. (federal official)

> Their model doesn't have any legal standing... it is a public administration document that is not grounded in law. It is linked to a norm but, in order to modify infrastructure, the norm isn't enough. This is more an agreement to work on the topic. (civil society actor)

> The conceptual model is good, but they need an operational model. (federal official)

> The model doesn't describe continuum of attention or speak of autonomy. It talks about teams of providers without saying how. It doesn't propose changes... there is no innovation. (civil society actor)

**CONASA**—The National Health Council is a cabinet-level platform that establishes priorities for the health sector and convenes state health officials quarterly to monitor progress in areas where agreements have been made. The CNEGySR was instrumental in locating professional midwifery as a topic of discussion in CONASA’s *Arranque Parejo en la Vida*\(^{20}\) committee in November 2016. The discussion resulted in a unanimous agreement to promote midwifery in all public health institutions and an intention to present the topic to CONASA.\(^{21}\) The action has symbolic importance but must be taken

---

\(^{19}\) Because the agency does not distinguish between birth care and other midwifery services along the continuum of care, not all states or sites that they support fit the criterion for inclusion in the evaluation.

\(^{20}\) Fair Start in Life program.

up by CONASA in order to become an agreement that holds state and health institutions accountable. One federal official explained it is unlikely that midwifery will be deemed a priority by CONASA without direct political support from the sub-secretarial or higher level.

**DGCES**—The Health Ministry’s Directorate General for Quality and Education in Health (DGCES) is now directly involved in advancing midwifery in the context of CNEGYSR’s emphasis on professional midwifery services provided by specialized nurses and technical midwives. Expanded coordination between the two agencies, facilitated by the GIIP, is a significant advance that has shaped how midwifery is positioned in the Ministry of Health, giving the topic broader relevance. In addition to supporting the virtual course mentioned above, DGCES launched its own virtual campus in 2017 to facilitate continuing education for public and private health personnel (http://educads.salud.gob.mx). The curriculum includes a course on evidence-based care for women and newborns that is oriented around midwifery principles. With more than 130,000 health personnel enrolled in courses in the first year, the platform offers significant potential for expanding knowledge and acceptance of midwifery concepts throughout the sector. Agency officials recognize that midwifery is not included in the platform as such but are exploring the possibility of bringing a more explicit reference to midwifery to the platform in the future by incorporating aspects of the virtual midwifery course.

DGCES’ Nursing Directorate (DE) similarly supports the advancement of a midwifery agenda. This division reports directly to the Director General and is charged with proposing policies, creating norms, guidelines and recommendations, and coordinating actions in all 32 states. Linked directly to the Permanent Commission on Nursing (CPE), which advises the Minister of Health on topics related to nursing, the DE makes recommendations and develops strategic programs to improve nursing education. Together the DE and the CPE coordinate the entire nursing sector.

The DE’s interest in professional midwifery was awakened by the CNEGYSR’s repositioning of the concept to focus more on existing personnel, namely obstetric and perinatal nurses, as professional midwives. After baseline, the DE and DGCES participated in the GIIP alongside their Education counterparts, provided leadership in development of the COMLE certification program, and played an active role on the evaluation committee of a national competition for innovative midwifery models of care sponsored by PAHO and the MacArthur Foundation.

The DE played a leading role, alongside CNEGYSR and PAHO, in updating Official Norm 020 (NOM020-SSA3), which regulates the practice of obstetric and perinatal nursing in the National Health System, including standards of practice for attending births. While NOM007 (2016) states that obstetric nurses, technical midwives and trained “traditional” midwives can attend low-risk births, a proposal for NOM020, that will regulate obstetric nurses, was in a second stage of legal review in 2018. This norm faces some resistance due to concern that the expanded role of nurses would displace other medical personnel. Once published, the revision to NOM020 will represent a significant normative advance, although only for nurse midwives.

**DGPLADES**—The Directorate General for Planning and Development (DGPLADES) is the Health Ministry agency charged with developing models of care for the whole health sector. Their Office of Traditional Medicine and Intercultural Development (MTDI) has been a committed proponent of humanized, women-centered models of care that contemplate diverse providers engaging in midwifery-style forms
of practice. While their commitment to this type of care is not new, DGPLADES made an important advance in June 2018 by publishing specific guidelines for implementation of its Model of Care for Women in Pregnancy, Birth and Postpartum.22 While DGPLADES has historically worked to support indigenous “traditional” midwives, the model and the new guidelines are applicable to all health system personnel in the country. The agency is not charged with operationalizing the model but provides initial training and support to states and health agencies upon request.

The DGPLADES model reflects years of prior work but took on new urgency in July 2017 following the National Human Rights Commission’s General Recommendation 31-2017, calling for accountability and concrete actions to reduce obstetric violence.23 The Recommendation was the product of two years’ effort by the Commission with numerous interviews and contributions by external experts, with support from the MacArthur Foundation and the Kellogg Foundation. The Recommendation’s intention is not to punish those who commit obstetric violence, rather to show the correct way to provide obstetric and neonatal care using the DGPLADES model. DGPLADES presented its model before the National Human Rights Commission and later in a Supreme Court forum and to more than 100 obstetricians representing various health sector institutions nationwide. In September 2018, DGPLADES was invited to present the model directly to the Minister of Health.

While DGPLADES and CNEySR historically worked closely to forge a unified vision and discourse in the Health Ministry, this collaboration has diminished in recent years. This is evident in the very different models introduced by the two agencies in the last year, each designed with little or no input from the other agency and very different perspectives on what is needed to advance.

| Indicator 3: States make policy or normative changes to incorporate high quality midwifery practices | Finding: Two states have incorporated midwifery concepts into maternal health policy, providing important examples of state initiative and leadership. |

The 2018 evaluation identified 14 states that have on-going, new or incipient efforts to incorporate professional midwifery in their health systems as a strategy to improve the quality of maternal and neonatal health care. These experiences offer rich diversity and important lessons about what might work in different contexts. In two cases, however, state governments have integrated the concept of midwifery or midwifery models of care into their Health Ministry’s policy framework.

- The Veracruz Health Ministry defined a two-year Strategic Plan for Maternal and Perinatal Health 2017-2018, to provide maternal and perinatal health services grounded in evidence-based practices and respect for the rights of women and newborns. The model, which includes a parto amigable (friendly birth) approach to combat obstetric violence, has broad support from the health minister, division directors, technical committees, department heads and various other officials. To ensure compliance with the Mexican normative framework, the Plan specifies actions to train personnel, including “non-medical hospital professionals” in accompaniment of normal births.24 While the plan does not refer specifically to midwifery, the state health ministry in place before the 2018 elections


was fully committed to integrating the services of professional midwives in attending normal births as part of multidisciplinary teams of practice. The initiative stressed the importance of connecting with national and international leaders in maternal and perinatal health and evidence-based practices, and provides training opportunities for health system personnel via the PAHO virtual campus and the health ministry’s own online platform. It remains to be seen whether this program will continue under the new state government.

- The Guerrero state government and Health Ministry officials have received national and international recognition for leadership in the integration of professional midwifery as a strategy for providing high-quality and culturally relevant maternal and perinatal health care grounded in evidence-based practices. The state’s health minister was invited to present their model at the 71st Global Health Assembly of the World Health Organization held in Switzerland in May 2018. Guerrero has the only public technical midwifery school (Tlapa) in Mexico. The school receives support from the state government for a program that is uniquely focused on indigenous students who are committed to working in the health system and in their communities. In addition to providing resources and broad political support, the health ministry signed an agreement of access to clinical practice at all hospitals in the mountain region where the school is located, thus resolving a problem that has hampered midwifery education elsewhere. The state’s midwifery initiative also extends to empirical indigenous midwifery practice and a perinatal nurse training program. State government actors interact frequently with a broad and well-coordinated group of civil society organizations promoting midwifery in Guerrero, as well as national and international actors, other state agencies, and other state governments, in an ongoing effort to enhance its midwifery models of care.

Other state governments have supported the design of midwifery experiences or models of care, although not at the level of state policy. These include Tabasco, which was piloting a successful midwifery experience in one Basic Community Hospital with significant success, including a high (and growing) proportion of births attended by midwives, documented reduction in cesareans, and a reduced number of women referred to hospitals. Tlaxcala developed a midwifery model of care at the initiative of obstetric nurses who wanted to specialize in perinatal care. They received support from the state’s Ministry of Health and the national CNEgySR in development of the model. In Morelos, the state government and Health Ministry developed a Sentinel Health Center model of care and opened the first-ever undergraduate degree program in professional midwifery.

In three states, officials commented that they would like to expand their midwifery commitments but are limited in their ability to do so by human resource constraints. At least six states (including Veracruz) mentioned they were considering opening midwifery schools in their states in response to the shortage, although they recognize this would not be a short-term solution.

| Indicator 4: Resources are allocated by federal agencies, states and/or private institutions to fund professional midwifery training or deployment programs |
| Finding: Federal budget resources for midwifery training and deployment continue to be limited, and only one state provides significant and sustained support for midwifery training. Private agencies such as the MacArthur Foundation have been a key source of support for state actors looking to initiate or strengthen midwifery programs. |
Since baseline, reductions in federal health budgets have impacted maternal health programs at all levels. Not only have these funds not grown, one source documented a substantial decrease in the Health Ministry budget for maternal and perinatal health between 2013 and 2018.25

At baseline and again in 2018, the same three funding mechanisms were available to state health ministries for health care initiatives. Two of the three have dedicated funds for maternal health; only one prioritizes midwifery:

- **Ramo 12** funds are allocated annually through AFASPE agreements for maternal health priorities defined by state health officials in consultation with CNEGySR. AFASPE resources are intended to strengthen training and help states contract professional midwives rather than providing comprehensive or long-term program support. In 2017, the CNEGySR distributed almost nine million pesos (over $500,000 US dollars) to 10 states to contract 11 perinatal nurses, 9 obstetric nurse midwives, 9 general nurse midwives, and 17 technical midwives, in addition to training and sensitization workshops for improving obstetric care.26 National officials say the funds are flexible and respect state sovereignty, while some state officials and national actors reported that the agency has a significant say in defining concepts and allocations. The funds are widely recognized as the most important source of national support to initiate or seed state midwifery efforts.

- **Seguro Popular** is a vast public health insurance system that provides health coverage to almost half of Mexicans who are not enrolled in other health care programs. The system decentralizes maternal health funds to the states through Annex 4, an agreement that defines spending concepts in the areas of service delivery, preventive actions and maternal health promotion. A Universal Catalogue of Health Interventions (CAUSES) lists all interventions eligible for coverage and the allowable amounts. Seguro Popular officials recognize states’ autonomy in determining the destination of these decentralized resources, although the funds can only be used for procedures listed in the CAUSES and performed by recognized personnel at an accredited facility. In 2018, interview data found differing opinions about whether Seguro Popular could be used to pay for professional midwifery services. It appears to be rare, at best, and can only happen if the midwife does not appear as the provider since professional midwives are not recognized as authorized personnel.

- **Ramo 33** is not focused on maternal health, rather it is a budgetary mechanism that transfers national resources to states and municipalities for expenditures in education, health, infrastructure, public security, food programs and social security, and educational infrastructure. The health component alone includes broad concepts such as medical attention, hospitals, maintenance, personnel, supplies, medicine, and equipment. While these resources are available to all states and can be broadly applied, this breadth also means that there is significant competition for the funds making it difficult for state maternal health programs to compete.

Guerrero has given significant and sustained support for the state’s technical midwifery training program, which is also the only program to be created as a decentralized public entity. More recently, pro-midwifery groups successfully negotiated with state authorities to get a budget line item for hiring professional midwives in Michoacán.

---


Because resources from national agencies have decreased since baseline, and state contributions are only beginning to expand, private institutions such as the MacArthur Foundation, international agencies and some organizations continue to be critical sources of support for professional midwifery in Mexico. Seven of 23 new midwifery insertion sites identified in 2018 received support from PAHO and the MacArthur Foundation as part of a national competition (the sites are indicated on Table 12, Appendix B). CASA similarly provides financial and technical support to emerging midwifery initiatives of states whose officials participate in its introduction to midwifery online course.

**Additional finding:**
While states are successfully advancing midwifery models of care without a national-level mandate, state-level officials claim the lack of a mandate makes the road more difficult and leaves the sustainability of their programs in question.

At baseline, employment codes and changes to NOM007 had opened the door for states to incorporate midwives into their public health services, but it was not easy for them to do so without federal guidelines indicating where midwives should work or what role they should play vis-à-vis other health care providers. State health officials interested in midwifery had to find their own way, often fighting rigid regulatory requirements or resistance from unconverted personnel. The lack of a national mandate also meant that once they were operating, midwifery programs were dependent on the interest or initiative of a few people and thus vulnerable to changes in government or leadership.

In 2018, states show even more innovation and leadership in promoting professional midwifery, but many state-level proponents worry that their experiences might not survive a change in leadership. For example, state health officials in Veracruz worked quickly to develop and launch a state-of-the-art maternal health strategy that includes a professional midwifery component. Their work prioritized sensitization of public health officials from the highest levels of government down to the operational level and required personnel to receive training to ensure broad adherence to norms and guidelines that reinforce evidence-based practice and a humanized or midwifery model of care. Their efforts were an attempt to stack the deck, so to speak, in favor of the model’s continuation after the 2019 change of government.

Officials in Veracruz and other states that faced re-election (Chiapas, Morelos, Puebla, Tabasco, and Mexico City) called for leadership from the national Health Ministry to ensure the advances they have made are sustainable.

Three national officials said a high-level mandate with new laws or guidelines is not needed, saying progress will happen at the local level without such a decree. But for state actors who wrestle with regulatory and budgetary obstacles that only the federation can resolve, this argument is not convincing.

---

**This is why it is so important that changes occur at the federal level. They are the only ones that can make normative changes that are harder to reverse. (state official)**

**A mandate is needed so that models don’t depend on administrative decision. (state official)**

---

[**[Our state] is working without (guidelines)... nothing was written, no law was changed. It is easier to do small pilot projects than something large and national.** (federal official)]

**[It is not true that the states are sovereign. The federation has significant weight (authority). If the federation says x or y, it would be rare for a state not to follow.** (state official)**}
We have to abide by norms, and those are defined by the federation. (state official)

We cannot include professional midwives in the public health system until federal legislation changes the National Health Law. The law needs to state that professional midwives exist and are legitimate health caregivers in order to promote professional midwifery in Mexico. (state official)

Seven federal officials and four nongovernmental actors echoed state officials’ call for greater national government leadership to consolidate the gains that have been made, and to lay out a path forward for all health sector institution.

With a change of government coming in (state), who knows what will happen to their program? Without a national public policy, a program depends on whether a person likes the topic. This doesn’t serve the national interest. We need a national policy that all institutions can fall in line with. (federal official)

I think the Health Ministry should take the lead and promote this agenda permanently... create working groups and models that have budgets. First there has to be political will and then the rest will flow more easily. (federal official)

This is the time to look at the normative framework and laws to see what is there and what is missing or needed...we need a normative and regulatory map to pinpoint needs. (federal official)

Progress has taken place in reverse.... Now it is clear that to sustain this progress professional midwifery needs to be integrated into the system. This means putting the figure in the National Health Law... to enable alignment in oversight of establishments. (federal official)

5.2 Recognition and Demand

The Theory of Change recognizes the important role of midwifery champions in shaping the public agenda by advocating for legal, normative and policy changes needed to successfully integrate high-quality professional midwifery into Mexico’s public health system, as well as for expanding knowledge and support for professional midwifery more generally. This was the Initiative’s largest area of investment, with almost all grants contributing in some way to expanding recognition and creating demand.

Throughout the Initiative, program efforts supported the vision outlined in the Theory of Change, with expanded focus in the final two years on encouraging dialogue and cross-sector collaboration among diverse midwifery proponents to forge common agendas that would lead to policy-relevant proposals and initiatives.
Objective: Strengthen networks and leadership, promote legitimacy and demand

Total spent: $5,928,200
Grants at baseline (11): $2,628,800
Grants since baseline (14): $3,300,000
Grant support for:
   - Media productions and creation of messages to foster greater understanding of professional midwifery and expand demand
   - Encouraging information sharing among midwifery proponents
   - Helping professional midwives gain professional acceptance
   - Launching a certification program
   - Augmenting sustainability by improving fundraising capabilities of pro-midwifery organizations
   - Continued (since baseline) support for innovative state-level work in Chiapas, Guerrero and Michoacán
   - Encouraging networking of pro-midwifery champions with other local, national and international actors in the nongovernmental and policy arenas
   - Disseminating pro-midwifery messages to raise awareness among reproductive age women and the general public

*Italics indicate new since baseline*

Specific methodology

The evaluation looked at individuals, organizations and institutions working to build understanding and create a more favorable environment for midwifery practice. These champions include midwives, civil society organizations (CSOs), academia, multilateral agencies, private foundations, as well as some public officials who are leading change in their agencies. Some of these individuals support midwives through efforts to strengthen the profession, amplify their voices, or expand employment options in the public health system. Others employ broader strategies to advance evidence-based, women-centered models of maternal and neonatal care in which midwifery is an important alternative for low risk pregnancies.27

At baseline, semi-structured interviews were conducted with 22 nongovernmental actors in Mexico City and six states. The purpose of the interviews was to identify the actors who were shaping the midwifery agenda and understand their achievements and challenges. In 2018, 15 interviews were conducted in Mexico City and three states, speaking with many of the same individuals. Interviews in 2018 looked for changes in size and composition of the pro-midwifery networks, new efforts to inform or shape public policy, and levels of recognition and demand among the audiences they seek to influence.

In addition to individual interviews, LOME, an electronic mapping application28 provided complementary data to document changes in the depth and nature of the pro-midwifery network during the 2015-2018 period. Foundation grantees and members of the Evaluation Advisory Committee in 2015 were invited to initiate the mapping process and again in 2018 to include new grantees and EAC members. The

---

27 Various terms are used to describe this alternative paradigm, including “parto humanizado” (humanized birth), “parto digno” (dignified birth), “atención centrada en la mujer” (woman-centered care), “parto libre” (free birth), “parto respetado” (respectful birth) and “parto amigable” (friendly birth), each with its own set of protagonists and detractors. For evaluation purposes, we use the terms “humanized birth” and “woman-centered care” because these are the terms used most frequently by practitioners on the ground, although we recognized that it is not universally accepted.

28 The LOME platform ([www.es.lome.io](http://www.es.lome.io)).
network map is intended to grow in an organic manner over time to register changes or deepening relationships in the midwifery field.

Finally, the evaluation commissioned reviews of national and state media outlets in 2015 and again in 2018, to understand how midwifery is portrayed in print and virtual media, as a factor that shapes, and to a certain extent reflects, acceptance and demand.

Summary of findings

At baseline, the midwifery ecosystem consisted of multiple actors whose perspectives brought diversity to the field, but who often could not agree on fundamental questions of identity or agenda. Midwives—an important part of the ecosystem—had opened schools and developed midwifery practice sites despite very limited political support and outright skepticism from the medical establishment. Their potential to influence policy-level change was constrained by internal disagreement around the question of who is or is not a midwife and their consequent inability to project a unified message or agenda.

The absence of a more inclusive definition of midwifery reinforced then-prevalent thinking among decision makers and health system officials that the term “midwife” referred only to “traditional” indigenous midwives, and the widespread lack of knowledge about the concept of professional midwifery. Large numbers professionals who are an important part of midwifery practice in other countries—namely obstetric and perinatal nurses who wanted to distinguish themselves as university-level nurses—were reluctant to identify as midwives because of similar assumptions.

In addition to midwives and their organizations, the 2015 mapping of midwifery champions looked at civil society organizations providing advocacy and programmatic support in related areas of work; academic researchers working in close collaboration with CSOs and advocates to situate the field and inform public debate; multilateral agencies such as UNFPA, PAHO and the UNICEF, and private foundations that were helping to establish dialogue with other high level actors while financing studies, advocacy and pilot experiences.

Government agencies, CNEgySR and the MTDI, both in the federal Ministry of Health, in 2015 were promoting specific aspects of midwifery in their own programs and in collaboration with some civil society actors. They were considered important potential allies because of their ability to support initiatives and models of care that could seed change in the larger health system. The data showed that even in these agencies, perceptions about midwifery varied wildly and not everyone was convinced it should be part of the model of care.

The baseline inquiry found that champions were making contributions and advances, but their efforts were often isolated. The barrier to progress at that time was not an organized opposition, rather a pervasive lack of information that enabled myths and misconceptions to persist. With elections just two and a half years away, informants expressed a need for more active cross-sector collaboration and multi-stakeholder alliances to more effectively inform opinions and define policy agendas and proposals.

After baseline, the Initiative redoubled efforts to support dialogue and encourage cross-sector collaboration among diverse midwifery proponents to forge common agendas that lead to policy-relevant proposals and initiatives. Strategic grant making was reoriented around the indicators with the objective of strengthening networks and leadership to build legitimacy, promote recognition and stimulate demand.
Three years later, in 2018, civil society midwifery proponents or champions, many of whom are Foundation grantees, play an important role in shaping the public agenda by expanding knowledge and information about professional midwifery. This growing network actors is comprised of diverse interests working collaboratively to document best practice, create and disseminate information, sensitize personnel, strengthen schools and curriculum, and inform norms and regulations to facilitate midwifery practice. Despite the relatively short period of time between baseline and 2018 data collection, there is an increase in the size and diversity of pro-midwifery networks and in levels of dialogue and collaboration around efforts to advance specific areas of work.

At baseline, policymakers had limited knowledge of midwives and what they could contribute to maternal and neonatal care, and less than half were familiar with the idea of professional midwifery. In 2018, largely as a result of the work of midwifery champions, it is now a familiar concept for the many maternal health policy makers interviewed and, in some cases, is now part of their programmatic strategies. While differences of strategy and vision have made it difficult for midwifery champions to project a common agenda, the sum total of information and technical resources they are providing has fundamentally changed the way that professional midwifery is understood today and may well shape the policy choices of incoming health ministry officials nationally and in some states.

**Indicator 5:** Diversity, density and strength of pro-midwifery networks, including among midwives

**Finding:** The community of pro-midwifery actors is larger, more diverse and more collaborative in 2018 than at baseline.

In 2018, Mexico’s community of midwifery champions is larger and more diverse, in part because many obstetric and especially perinatal nurses now identify more readily with professional midwifery. Several factors set the stage for this change, among them: more explicit reference to birth care in the curriculum of the country’s two largest nursing educational programs; efforts of the Health Ministry’s CNEGYSR to encourage states to contract specialized nurse midwives; attention to emerging nurse-centered midwifery models of care in states like Tlaxcala; and the 2018 creation of the Association of Professional Midwives, led by prominent perinatal nurses who are also midwifery champions.

As the profile of midwifery in Mexico broadened, Initiative partners built bridges among diverse groups of midwives through dialogue, information exchange, leadership development, and joint participation in national and international forums. These efforts enabled some midwives to see themselves as social leaders and part of a larger movement.

In addition to a larger and more diverse network of midwives, Mexico’s pro-midwifery movement has grown as organizations previously working on maternal health or related fields turned their attention to midwifery. The Initiative expanded its grant portfolio to include more than a dozen organizations, many new to midwifery, that brought experience and innovative methods to strengthen leadership, facilitate dialogue and information sharing, improve messaging and communication, or otherwise enhance the
work of the larger pro-midwifery community. It remains to be seen whether these organizations will continue to work on midwifery after the Initiative closes.

A 2017 Midwifery Community Mapping carried out by a Foundation grantee documented 19 organizations working to promote professional midwifery at the national level. A simultaneous mapping of eight states showed 15 of the 19 national actors were also working in one or more states in collaboration with local groups. Guerrero and Chiapas had the largest number of pro-midwifery organizations, and the highest local representation in the networks and the most alliances.\(^\text{29}\)

| Organizations working to promote professional midwifery 2017 (national and 8 states) |
|-----------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| National level                               | Total number of organizations                  | Number of local organizations                  |
| 19                                            | 15                                            |                                               |
| Guerrero                                     | 14                                            | 7                                             |
| 15                                            |                                               |                                               |
| Chiapas                                      | 12                                            | 7                                             |
| 12                                            |                                               |                                               |
| Morelos                                      | 11                                            | 1                                             |
| 11                                            |                                               |                                               |
| Oaxaca                                       | 10                                            | 7                                             |
| 10                                            |                                               |                                               |
| Michoacán                                    | 7                                             | 1                                             |
| 7                                             |                                               |                                               |
| Hidalgo                                      | 7                                             | 0                                             |
| 7                                             |                                               |                                               |
| San Luis Potosí                              | 7                                             | 0                                             |
| 7                                             |                                               |                                               |
| Veracruz                                     | 7                                             | 0                                             |
| 7                                             |                                               |                                               |

Source: Comunidad de Partería en México: Mapeo de Resultados 2017, INSAD

The mapping documented 15 alliances or collaborations among national champions, and a total of 33 in the eight states studied. An additional eight organizations began their midwifery work after the 2017 mapping was complete or were not identified at that time.

The collaborations among midwifery proponents feature efforts to document best practice, share knowledge, train personnel, strengthen schools and curriculum, and improve norms and regulations to facilitate midwifery practice. Examples include:

- A national campaign, launched in 2017, that unites more than 20 organizations committed to expanding recognition and demand for professional midwifery, promoting normative and regulatory reform, training medical personnel, and fostering the integration of midwives into health care teams;

- A network of 15 institutions that joined forces to strengthen the technical and pedagogical needs of midwifery faculty and training programs; and

- A statewide campaign in Guerrero to encourage expanded policy-level commitments.

The LOME electronic mapping provides additional information about the nature and density of the midwifery community. At baseline, 85 organizations and institutions (and some individuals) registered as members of the network. At that time, the mapping showed two constellations of actors with fairly separate relationships: on the one side, activists and international organizations and, on the other,

---

\(^{29}\) Comunidad de Partería en México: Mapeo de Resultados 2017 (Community of Midwifery in Mexico: Results Mapping 2017). PowerPoint® presentation by Gabriela Díaz, INSAD.
Institutions representing nurse- and technical midwives. In 2018, the number of network members increased to 93 and showed greater connectivity among types of members, indicating progress in networking and collaboration. (See Exhibit 7 Appendix A for illustrations of the connectivity in 2015 and 2018.)

**Indicator 6:**
Key players agree on model(s) of care that describe the roles of midwives and how they should be hired

**Finding:**
Midwifery champions have not reached formal agreement on the models of care they are promoting and continue to have differing priorities around strategy. However, many are working together to improve specific components of the enabling environment.

In 2018, collaboration was far more common than at baseline, although midwifery champions still lack a strong collective voice or consensus around common objectives to advance policy-level change. The community of midwives, in particular, continues to be constrained by disagreement around fundamental issues like certification, skepticism about the skills or legitimacy of others, and concerns by some (including perinatal nurses) that the large number of obstetric nurses would eclipse other smaller (technical) or non-professional (autonomous and traditional) form of practice.

> We can't say that the perinatal and LEOs are midwives because the government decided that... or because there are more of them. (civil society actor, midwife)

> We have more definition and more communication, but (nothing has improved), we just know each other better.... not much changed beyond that. (civil society actor)

> The midwifery field is fragmented... There is a power struggle. (civil society actor)

On the issue of certification, for example, midwifery champions disagree about whether it is a priority or even necessary. Professional midwives who complete their studies at an accredited school earn a diploma and can then apply for a professional license at the technical or university level depending on their program of study. For these individuals, certification is seen as unnecessary, but many believe it could add another layer of validation and quality control as it would demonstrate their level of excellence on the job. For practicing midwives who do not have a diploma or professional credentials—namely autonomous midwives trained in other countries, and empirical or “traditional” midwives trained in their communities—certification is a subject of ongoing debate. "Traditional" midwives have an existing certification option through the Health Ministry’s DGPLADES, and do not agree on whether a peer-based certification would benefit or threaten their practice. Despite these disagreements, many respondents believe certification in some form would demonstrate the quality of midwifery education and practice, thus expanding acceptance and legitimacy.

> A women-centered model implies a reorganization of roles within healthcare teams, including shifts, personnel, physical areas... (multilateral agency representative)

> (Midwifery is) not just the work of a single professional but the shared exercise between diverse health professionals, including nurses, technical staff, and also medical staff... focused on obstetric attention. (Federal official)

Beyond single issues, as midwifery work has advanced, two distinct strategies or movements have emerged: the midwife as ideal provider for situations of normal birth versus promotion of evidence-based, women-centered maternal and neonatal care by all providers. The two approaches may ultimately be compatible but, at this early stage, they point to different priorities making it difficult for advocates to build consensus around a single strategy or agenda.
This strategic disjuncture extends into Ministry of Health agencies that work alongside nongovernmental actors to promote midwifery. One agency, the Ministry’s main policy vector for maternal health, has provided resources and guidance to states interested in hiring professional midwives. Meanwhile, another Health Ministry directorate charged with designing and piloting innovations in models of care has introduced (with specific guidelines that states are obliged to follow) a new model of evidence-based, women-centered obstetric and neonatal care in which skilled midwives (professional and traditional) could have a role to play alongside other providers.

At baseline, policy makers had very limited knowledge of different types of midwives and what they could contribute to maternal and neonatal care. Those who spoke positively about midwifery often associated the term with empirical or “traditional” midwifery. Less than half of informants were familiar with the concept of professional midwifery. An independent media analysis provided insight into the information deficit by showing that midwifery barely registered in the media. Messages that were transmitted about midwifery often reinforced the association with “traditional” midwives or the important, but more polemical at that moment, topic of obstetric violence.  

In 2018, as dialogue and collaboration in the pro-midwifery field has increased, so too has the participation of public sector agencies and officials in spaces where midwifery initiatives are designed and discussed. The efforts of CNE GySR to promote professional midwifery through technical and financial assistance to states focused new attention on obstetric nurses and perinatal specialists as existing personnel able to satisfy rising demand for midwifery services, as well as technical midwives in states like Guerrero, Tabasco and Veracruz where interest was strong. In the same period of time, Health Ministry officials and high-level nongovernmental proponents have worked together in the context of the GIIP to define professional midwifery, further contributing to this shift. For several officials, the incorporation of nurses into the midwifery paradigm satisfied their prior concerns, making it easier for them to get on board.

---

30 Comunicación e Información de la Mujer (CIMAC), Monitoreo y análisis de la partería en los medios de comunicación, Comparativo 2015-2017
The 2018 media study found no growth in coverage of midwifery as a topic nor expanded visibility of midwifery champions, an indication that expanded efforts had not yet reached the level of broader public discourse. Indeed, officials in health system institutions that do not use professional midwives continue to have very little knowledge of midwifery initiatives in the Health Ministry or at the state level. But almost all expressed curiosity or interest upon learning that professional midwifery includes technical midwives as well as specialized nurses.

Only two officials (of 18) had no knowledge at all of professional midwifery, one expressing certainty that professional midwives or midwifery models of care do not exist in Mexico in any form.

Despite having limited knowledge of existing midwifery experiences, six officials (four of whom do not work on or promote midwifery) described “ideal scenarios” that are consistent with the objectives of midwifery advocates: midwives working at the primary and intermediate levels attending low risk births with autonomy, clear roles, decent pay, support, and good referral systems.

Interviews with these public officials highlighted the importance of inspirational experiences for igniting interest and expanding understanding of midwifery models of care. Most of the officials interviewed (14 out of 18) had heard about or visited one or two midwifery models of care. The impressions they shared were largely positive but uninformed about the details of the experiences or their potential to serve as models for replication.

State level actors perceive greater acceptance of professional midwifery among federal officials but recognize that their experiences are still dependent on the good will of individuals.

We have nurses, although not all are trained or experienced in attending births. It would be fabulous to have these nurses attend (normal) births instead of doctors or residents... (federal official)

For me (midwifery is compelling), not in terms of reducing maternal mortality—that is no longer our big problem—but rather to improve maternal and perinatal health, which is fundamental. Quality of care is an enormous challenge that requires resources and time to address. (federal official)

Midwifery is a good option for improving access to quality care with a humanized approach.... As an electoral year, it is a strategic moment to position the topic in the public agenda information with ideas and proposals. (federal official)

The ideal model would be to place professional midwives in locations with high productivity [number of births], where they are the primary provider, not dependent on others but also not alone... focused on obstetric care, not just births. (federal official)

We see a change in attitudes from local (state and jurisdictional) health authorities. For example, instead of sending everyone to the hospitals, they are more open to other ideas. (state-level proponent)

In various states, health ministry officials and medical personnel have responded positively to training programs offered by midwifery proponents (CASA, INSP, Gynuity, UNFPA and PAHO, among others), resulting in expanded knowledge of professional midwifery at the state level. Michoacán, one of the only states to create a budget line item for midwifery, similarly had a high number of health officials and service providers participate in the introductory programs.
Indicator 8: Interest and action among state actors to document and disseminate examples of high-quality midwifery practice

Finding:
Efforts to document and disseminate examples of high quality midwifery practice are incipient, reflecting the early stage of many midwifery experiences. But state officials are seeking guidance from midwifery proponents and other states through technical assistance exchanges, social media and video, e-learning programs, and other formats.

In 2018 data collection, few informants reported having received information or materials showcasing successful experiences from other states, reflecting the fact that many of the newer experiences are still developing and products may be forthcoming. Health Ministry officials in three states—Quintana Roo, Tabasco, and Guerrero—are planning, or have completed and circulated, videos to document and disseminate their experiences.

While authorities are not yet documenting actively, many are discussing best practices and challenges through exchanges with other states, often with the help of midwifery champions. Health officials in Michoacán, for example, met with Guerrero officials and several Foundation grantees to inform their planning. CNEGYSR, PAHO and UNFPA have encouraged the exchange of information and convened meetings of state officials and midwives in October 2017 and again in August 2018 for this purpose.

5.3 Educational Programs

The Foundation’s Theory of Change recognizes that in order to increase the number of midwives available to work in the public health system, the number, diversity and capacity of midwifery education programs must increase. The programs should agree on core competencies and evidence-based practices to include in their curricula. The strategy also proposes that certification protocols are necessary to verify that practicing midwives have the competencies required to provide safe and high-quality maternal and neonatal care.

Program strategy in this area prioritized actions to enhance the number and quality of midwifery education options. After baseline, expanded emphasis was placed on strengthening program content and ensuring access—availability of clinical practicum sites that allow students to adhere to evidence-based practices.

Objective: Expand and build on education options

Total spent: $3,862,000
Grants at baseline (8): $1,647,000
Grants since baseline (5): $2,215,000
Grant support for:
- Scholarships for midwifery students
- Efforts to strengthen curricula of existing programs
- Technical assistance and dialogue among diverse programs
- Availability of training materials
- Expanding technical, nurse and perinatal midwifery programs
- Promoting alternative university-level midwifery programs
- Encouraging indigenous women to apply to professional midwifery programs
- Consensus-building around certification options

*Italics indicates new since baseline*
Specific methodology

Methods and data reflect the indicators defined for midwifery training programs. The baseline assessment looked at different program models that train midwives qualified to work in Mexico’s public health system. Evaluators talked with 17 program directors, sub-directors, and clinical coordinators who provided information about 11 programs (including the four autonomous midwives or apprenticeship programs that were not included in the analysis in 2018). In addition, the evaluation team interviewed five directors at hospitals that host students and state officials who coordinate or support training programs provided data, for a total of 22 interviews.

In 2018, evaluators interviewed 25 program directors, sub-directors, and clinical coordinators, most of whom are also faculty, in 12 programs. Additional data was provided by researchers, representatives of international organizations, national and state level technological program directors, and directors of a new program opening in August 2018, for a total of 29 collaborators.

Instruments for 2018 data collection were adjusted to add questions that arose from baseline—about clinical practice sites and networks, among other things. The 2018 data set does not include autonomous programs because they do not train midwives to enter the public health sector, in spite of important contributions to maternal health, education and enriching knowledge about best practices.

Summary of findings

Programs that train professional midwives in Mexico are greater in number, and all of the programs report high levels of adherence to evidence-based practices. The number of midwifery students has also increased three-fold, largely due to expanded training of obstetric nurses. It will take several years before there are enough professional midwives to meet estimated demand in Mexico, but progress since baseline has been significant.

The additional students present a challenge for programs as they compete for access to clinical practicum sites, although the problem may diminish as new midwifery insertion sites are developed and health authorities begin to recognize the potential contributions of midwives to their statewide goals.

The Foundation, through its grantees, supported the trend of promoting more diverse educational options by enabling conversations among training models, supporting groups setting up new programs, providing scholarships, facilitating conversation about core competencies, and helping midwifery advocates develop certification options.

| Indicator 9: New and/or strengthened programs that respond to diverse needs | Finding: The number of accredited programs that train midwives to attend births in public health institutions increased by 57% in 2018, offering new training opportunities in all four educational models. With additional programs under development, the number of midwifery programs is poised to grow even further. |

---

31 Instituto Nacional de Salud Pública (INSP), a grantee, presented somewhat different data in Formación, Mercado Laboral y Costo Efectividad de la Parte en México, in their webinar presenting their results: "Resultados del Impacto al Modelo de Partería en México: Análisis y Recomendaciones desde el INSP" 28 September 2018. Discrepancies were primarily due to the fact that their research included many private institutions, as well as programs that do not currently train in labor and delivery per se.
The baseline evaluation identified seven professional midwifery education programs that were training midwives qualified for employment in public health institutions: two technical midwife programs, one obstetric nursing program, one undergraduate reproductive health & midwifery program and three perinatal nurse specialist programs. All were accredited educational programs, meaning they had been issued a RVOE (Registration of Official Validation of Studies)\textsuperscript{32} by the Comité para la Formación de Recursos Humanos en Salud (CIFRHS), a joint commission of the Ministries of Education and of Health.\textsuperscript{33} Of these, nursing programs were the most stable based on our data on their fiscal security, dedicated infrastructure, and high enrollments. Most of programs had faculty and students with little ethnic diversity, and most faculty were female. Most students and programs were in Mexico City, with less availability in the states and regions with the highest maternal mortality rates.

By the time of the 2018 assessment, Mexico had 12 sites that train professional midwives, an 83\% increase in just over two years, with new programs in each of the four models (Table 2, Appendix B). Data show little change in the relative stability of the programs, with those located in large publicly-supported institutions having greater stability due to their infrastructure and equipment, secure public funding, and high enrollments. Obstetric nursing programs continue to rank as the most stable, with little need for outside funding (Table 3, Appendix B).

Scholarship support, a new factor considered in 2018, is important for the stability of most of the technical and undergraduate programs, and less so for the nursing programs. Despite the fact that tuition is low at state institutions, many students—across programs—receive scholarship support from Mexico’s National Science Council (CONACyT), or in the form of tuition waivers, paid time off or work schedule flexibility. The Guerrero Secretariat of Indigenous and Community Affairs offers scholarships to midwifery students, the only state that reported doing so. Scholarships from the International Institute of Education (IIE)—supported by the MacArthur Foundation—are critical for most (two out of three) of the technical and undergraduate degree programs, providing support to one in five current students (Table 4, Appendix B).

In the programs for which data was available, about 22\% of teaching staff\textsuperscript{34} are physicians, and 90\% of those programs have directors with the same degree as the program they direct. Technical, autonomous and empirical midwives make up a smaller proportion of the staff in almost all programs. The socio-demographic composition of the teaching staff is half female (58\%), and only 11\% are indigenous (most in Tlapa, Guerrero)—lower than the national percentage, and much lower than the proportion in a number of the states most served by midwives (See Table 5, Appendix B).

The proportion of technical midwifery compared to nurse midwifery programs has stayed the same from baseline to 2018. Technical midwife programs make up one fourth of the programs at both time periods, and the nursing programs and undergraduate reproductive health programs have identical percentages (17\%). The perinatal nurse specialist programs are by far the most numerous, though, as graduate

\textsuperscript{32} The UNAM as an autonomous (independent of the Education Secretariat) public university, as well as those under the Education Secretariat, have additional, internal, processes for accrediting programs.

\textsuperscript{33} See Ministry of Education (Secretaría de Educación Pública, SEP) [http://www.sirvoes.sep.gob.mx/sirvoes/], and [http://www.sirvoes.sep.gob.mx/sirvoes/jspMarcoNormativo.jsp]. In order to meet RVOE criteria, schools must have teaching staff with degrees in appropriate fields; adequate installations or infrastructure, and sound curriculum, among other things.

\textsuperscript{34} The 2018 analysis looked at teaching staff from the technical, undergraduate and perinatal programs. Data were unavailable from the larger universities because hundreds of faculty teach in multiple programs or teach only part-time. With one or two exceptions, each program has only one full-time staff. In most of the programs, staffing changes from semester to semester.
residencies, they produce lower numbers of students than the obstetric nursing programs (50% and 47%, respectively).

### Nueve Lunas: A Unique Model

The Nueve Lunas introduction to midwifery workshop in Oaxaca does not seek to prepare midwives for insertion into the public health system, and so is not included in the evaluation, but merits attention as a special case because it offers a strong and unique model of midwifery education with evidence-based training and community ties, which have given it a strong voice in the national conversation. A MacArthur Foundation grantee, Nueve Lunas prepares midwives “en la tradición” (following tradition) by blending community knowledge with evidence-based practices. Students are immersed in a comprehensive program of 18 workshops (45 hours) and community practice with empirical or “traditional” midwives, with the support of community authorities. The curriculum emphasizes culture and is committed to a vision that removes midwifery from the medical domain. Unlike other programs, Nueve Lunas’ tutors or teachers include empirical, technical and autonomous midwives, as well as medical personnel. The student body is similarly diverse, from indigenous to foreign students. Nueve Lunas had 15 students in 2018, down from 20 in 2015. The program has not sought accreditation but follows the ICM list of competencies and meets the evaluators’ list of 22 practices almost completely, the only exception to this list is that they do not use oxytocin in the third stage of labor to deliver the placenta.

### Future programs

In the months following 2018 data collection, two additional midwifery education programs were poised to begin operation, and one may close:

- Perinatal Nursing Specialty at the Women’s Hospital in Yautepex, Morelos will re-open in 2018.
- An undergraduate degree in Reproductive Health and Midwifery at the Technological University of Tulancingo in Hidalgo is set to open in August 2018.
- Mexico’s founding midwifery program, CASA, will close its doors as the organization’s new leaders contemplate future directions.

Several additional education programs were detected in 2018, at various stages of discussion, design or development. These possibilities include:

- Three undergraduate degree programs at the intercultural universities in Hidalgo, Mexico State and Veracruz
- Three post graduate perinatal specialist programs at the Autonomous University of Hidalgo, General Hospital in Mexico City, and National Institute of Perinatology in Mexico City, and a planned reopened program in Morelos.
- One maternal health program at the Polytechnic University of the Huasteca, in Hidalgo
- Multiple (1 to 20) new or expanded obstetric nursing programs at autonomous universities in Guerrero and Quintana Roo, and multiple affiliates in several states of the ENEO-UNAM’s obstetric nursing school

Reflecting on the significant—and potentially ongoing—increase in midwifery education programs since baseline, the change that has most impacted the numbers of professional midwives in training is the ENEO-UNAM decision to modify its curriculum to include more women-centered and evidence-based practices and prepare obstetric nurses for labor and delivery care. While this change adds just one educational site to the total for 2018, it represents a major change in the panorama for nurse midwives because of its stability, numbers, and potentially broad geographic reach. The other five new sites are
among the least stable programs, as may be typical of new schools: two are the least stable (score of 2.5/5) and the others only somewhat better (3.5/5) (Table 3, Appendix B).

In sum, there are more accredited programs with varying degrees of fiscal stability, property ownership, equipment, and scholarships.

| Indicator 10: Students enrolled, graduated and/or licensed | Finding: The number of midwifery students enrolled at the beginning of the 2017-2018 academic year increased over three times compared to baseline, with the largest increase coming from expanded training of obstetric nurses. |

Baseline research identified 651 midwifery students. In 2018, there are 2,148 students enrolled in midwifery training programs, an increase of over 300%. Of these, most (90%) are in undergraduate obstetric nursing programs; the rest are in technical midwifery (4%), undergraduate reproductive health (2%), and perinatal nurse specialist programs (3%) (Table 6, Appendix B). The largest contribution to the increased number of students (1,400) comes from ENEO-UNAM obstetric nursing students who entered after the obstetric nursing curriculum was revised in 2015 to include a more woman-centered approach and evidence-based medicine with training in attending births.

If the goal were for midwives to attend 389,364 births, or 20% of Mexico’s 1.9 million normal births, at the WHO estimated rate of 175 births per midwife per year, Mexico needs over 2,000 midwives. Given current enrollments, and an estimated yearly production of just under 600 midwives per year, Mexico could have 2000 midwives within four years (see Table 7, Appendix B). The timeline could be even shorter if new accredited programs began operation. Many more midwives are needed if a higher percentage of midwife-attended births were desired, like the 60% to 70% in Chile and Peru, countries that have successfully institutionalized midwifery.

However, this timeframe is contingent on a number of necessary conditions: sufficient enrollments and graduation rates from programs with adequate clinical training, midwives interested in this career, and sufficient, adequately remunerated jobs, in sites where enough women give birth and accept or demand a midwife, and where midwives can attend births using the midwifery model. To date, these criteria are not being met on a consistent basis.

These trends show that a much larger proportion of midwives will be obstetric nurses in the future, followed by much smaller percentages of undergraduate degree professionals and perinatal nurse specialists. While fewer technical midwives may be trained in the future, they may still be highly sought after in certain areas of the country, such as Guerrero, Puebla and Veracruz, where isolated geography and low salary mean it is difficult to recruit doctors and nurses.

| Indicator 11: Agreement/adherence to core competencies in curricula and classroom instruction | Finding: Educational programs around the country report a high level of adherence to evidence-based midwifery practices, in most cases higher than at baseline. |

35 Note, this is a correction over baseline that calculated only one class, not all enrolled students, for the ESEO.
36 Of 2,290,375 births per year in 2018 (World Population Review [http://worldpopulationreview.com/countries/mexico-population/] (accessed 9 December 2018), we estimate that 80%, or 1,832,300, are normal births.
At baseline, according to interviews with school directors, technical midwifery programs taught 100% of the evidence-based practices, undergraduate reproductive health and obstetric nursing programs each taught 91%, and perinatal nurse specialist programs 87% of the practices (see Table 8, Appendix B).

In terms of compliance with evidence-based practices in training programs, directors’ reports in 2018 indicate that undergraduate reproductive health degree programs increased compliance to 95%, as did the obstetric nursing programs and the perinatal nurse specialist programs to 96%. The reported adherence for technical midwifery schools went down slightly but remained at a high level of 95%. Several informants expressed concern, however, about qualitative differences in training among different types of midwives.

**Indicator 12:**
Clinical sites that allow students to adhere to evidence based practices

**Finding:**
Educational programs face ongoing challenges in guaranteeing access to clinical practicum sites that allow students to attend births and apply evidence-based practices, an indication that not all students graduate with the practical experience required to ensure competence.

At baseline, interviews with school directors brought to light a major obstacle for training more midwives: far too often, students cannot be placed in clinical practicum sites where they can practice attending births or apply the evidence-based practices they had been taught. This was due to a range of factors including the limited number of sites where midwives are allowed to attend births using midwifery or humanized practices, skepticism by directors at clinical sites about the competence of the students they were receiving, and, in some cases, a preference for giving medical residents and other trainees priority in attending labor and delivery.

In 2018, this challenge came to the fore even more starkly as the ENEO-UNAM program seeks clinical practicum sites for 350 students every year. Located in Mexico City, the program competes with many medical schools to find sites where its students can attend low risk births before graduating, or as *pasantes* doing their social service. With this reality in mind, the ENEO reports requiring 24 births for graduation. As a result of the lack of clinical practice sites during their training or in their social service period, interview data show examples of some obstetric nurses doing their obligatory social service in sites on the other side of the country where they were able to attend births with less competition from medical residents.

Of the 12 education sites identified in 2018, only five directors report having sufficient access to practicum sites. The other seven report insufficient or partial access due to lack of space or lack of

**The directors of the available sites don’t think that midwives in training have sufficient clinical skills to attend births. The doctors don’t want (to let them).** (director, obstetric nursing program)

**We have (barely enough), but less all the time, as private schools have more access (to clinical sites), because they pay.** (program director)
medical personnel willing to allow students to attend births (Table 9, Appendix B). This obstacle affects 447, or 63%, of students.

As a result, across programs, the variance in the number of births required for graduation is dramatic, ranging from 0 to 90.\(^{38}\) Technical and undergraduate programs fall in the mid to high range (30-80), as does the Polytechnic University’s obstetric nursing program (90). The ENEO-UNAM is at the low end (24). Perinatal nursing program requirements vary more than any other type of programs, ranging from 0 to 60 (see Table 10, Appendix B).

**Indicator 13:** Certification and/or licensing protocols are developed

**Finding:** Certification for obstetric and perinatal nurse midwives is now available in the Mexico City area with possibilities for future expansion. Broad-scale, competency-based certification that recognizes distinct types of practice remain elusive, however, and is the subject of ongoing debate.

At baseline, there were no midwifery certification options available in Mexico, although the Mexican Association of Midwifery (AMP) had begun an initiative to develop an inclusive, skills-based certification protocol with input from diverse types of midwives. The debate around certification was polarized, with tension surrounding questions of whether certification would be useful, for whom, who should certify, and with what criteria. In 2018, many of these questions are still being debated.

In 2017, amidst the debate, a group of midwifery specialists developed a certification program focused on obstetric care under the auspices of the Mexican College of Nurse Practitioners (COMLE). The program ran its first certification with 82 participants, all obstetric and perinatal nurses from Mexico City and the surrounding area. Program directors expressed an interest in extending the program to include technical midwives in the future. The program currently has limited geographic reach because COMLE has only four locations (Mexico City, Monterrey, Puebla, Veracruz). The Mexican Federation of Nursing Colleges (FEMCE), with a large number of affiliated schools, was also recognized by the Education Secretariat (SEP) in 2018 as a certifying body and might eventually expand the scope of nurse certification significantly.

This process was criticized by some informants who work outside the obstetric nursing field because it currently only applies to obstetric nurses and does not rely on competency-based training.

For other professional midwives, certification is still not an option. The Mexican Association of Midwives (AMP) convened diverse midwives to establish agreement around core competencies but has been unable to gain Health Ministry support for its inclusive, peer-led, competency-based certification proposal. The AMP-led certification proposal was not accepted by the Health Ministry because the proposed certifying body is not recognized in Mexico, but the efforts contributed to development of a continuing education program as a step toward certification.

---

In the education realm, 10 of 12 program directors believe certification is necessary. (Some directors understood certification to refer to internal curricular oversight, such as tracking courses completed, but for the purposes of this evaluation, certification refers to external processes that test knowledge or competencies once on the job, rather than internal oversight.) Outside of the education setting, many midwifery proponents—including the Foundation—believe that certification is a goal worthy of their attention because it would offer ongoing validation of midwives’ competencies, which in turn could help overcome widespread misunderstanding and doubt (as was documented by the baseline evaluation) among medical personnel and policy makers.

**Additional finding:**
Directors of educational programs interact more frequently in 2018 than at baseline.

In addition to these five indicators, directors of programs were asked about their interaction with other programs. The extent to which program directors interact with, or have knowledge of, other programs is a measure that speaks to the creation and existence of a community. At baseline, schisms between programs and models ranged from lack of information to skepticism or overt hostility to other approaches to midwifery. Program directors were often unaware of whether other programs taught evidence-based practices or had adequate clinical training.

In 2018, 11 directors said they were familiar with the curricula of other midwifery training programs, and four reported knowing at least something about other models. Foundation grants have supported this progress: one grantee created the Midwifery Community (Comunidad de Partería[^39]) that provided an online platform of information, webinars and workshops in which at least four program directors participated. UNFPA convened professional midwifery schools—including a perinatal specialist program, two undergraduate programs, and one autonomous program—to share advances and challenges in 2018.^[40]

### 5.4 Employment and Quality of Care

The Theory of Change posits that the institutionalization of professional midwifery in public health services in Mexico will enhance the quality of care women and newborns receive. It proposed that during the Initiative’s operation, the number of sites that employ midwives and the number of midwives deployed in those settings would increase. It was expected that midwives would provide high-quality care and that women would be satisfied with the care they received from midwives.

A major thrust of grant making was to help the development of model sites and enhance the quality of existing ones. This culminated in a large competition program that provided sub-grants to ten/midwifery deployment sites around the country.

[^39]: Comunidad de partería webinar [http://sitio.comunidadparteriamexico.org/].
[^40]: Memoria. Encuentro de intercambio de experiencias entre Escuelas Formadores de Parteras Profesionales. 23-24 April, 2018, Cuernavaca, Morelos. (Exchange of Experiences between Professional Midwifery Schools).
Objective: Integrate models into health care systems

Total spent: $4,268,800
Grants at baseline (6): $2,768,800
Grants since baseline (3): $1,500,000
Grant support for:
  o *Implementation of midwifery services in one hospital in Mexico City*
  o *Strengthening educational opportunities for professional midwives in Michoacán*
  o *Enhancing midwifery services in ten sites around the country through sub grant awards*
  o *Strengthening existing deployment sites*
  o *Promoting task sharing & evidence-based practices*
  o *Mapping of midwifery services in the private sector*
  o *Promoting perinatal nurse midwifery at primary level in Tlaxcala*
  o *Helping the CNEGySR Center define and incorporate a midwifery model*
  o *Demonstrating the effectiveness of the midwifery model in Chiapas*

*Italics indicate new since baseline*

Specific methodology

Information provided by EAC advisors and “snowball sampling” were used to identify sites in which non-medical service providers are employed to attend labor and delivery of women with low risk pregnancies. At each employment site identified, one or more directors was interviewed, at times the head of nursing and/or education as well as the overall director. The evaluators interviewed midwives in as many shifts as possible and women service users (seven per site at baseline, five in 2018) who had delivered vaginally in the prior year. (See Table 1, Appendix B, for distribution by state of people interviewed and Table 11, Appendix B, for general characteristics of the women service users.)

To assess the quality of care provided by midwives and physicians (at baseline) and received by women service users, the interviews asked about the evidence-based practices used during labor and delivery, as described earlier in this report, as well as practices included in Mexican Official Norms and WHO guidelines for prenatal, postpartum and neonatal care.

Summary of findings

In just over two years, there are more midwives attending low risk births in more sites and more states than at baseline. Labor conditions for these midwives have improved slightly but continue to be deficient and under-resourced. In addition, some sites continue to struggle with low productivity and difficulties related to referral of patients who develop complications.

Assessment of quality of care shows that a higher percentage of sites subscribe to a midwifery model, meaning they are supportive of evidence-based practices. Quality of care is highest in those settings. The challenge is that almost half of the midwives employed in the public health system say they are not able to provide care according to those standards. Even fewer are able to do so in sites where they were hired without a comprehensive midwifery vision, especially at secondary and tertiary level institutions. Finally, in contrast to baseline when nurse perinatal specialists reported more frequent use of evidence-based practices and techniques that conform to Mexican normativity through the continuum of care,
different kinds of midwives performed equally well in 2018. Knowledge of emergency obstetric and neonatal care practices is one area in which all types midwives have room for improvement. Women service users continue to show high levels of satisfaction with the care they received from midwives.

**Indicator 14:**
Description of midwives who attend births employed in the public health system

**Finding:**
In just over two years, Mexico has 45% more midwives attending low-risk pregnancies and almost twice as many sites where midwives are employed. Labor conditions for midwives have improved only slightly.

At baseline, there were 174 midwives attending births in 19 sites in the public health system in 11 states. Labor conditions were poor. Almost half the midwives at baseline had short-term contracts or no contract at all. Midwives received salaries lower than those stipulated by law, and over half received incomplete or no benefits.

The 2018 data collection found 255 professional midwives attending births at 36 sites in 14 states. Of the 81 additional midwives found in 2018, only 4 are technical midwives.

Among the 117 midwives interviewed in 2018, most of the nurse midwives are employed in midwifery model sites (see below). It was more common to find technical midwives in midwife employment settings than nurse midwives (Table 16, Appendix B).

Over half of the midwives interviewed work at the primary level. Nurse midwives are the most common type of midwife working at the primary care level while technical midwives are most often employed at the intermediate level and higher. (Table 17 Appendix B).

Over half of the midwives in 2018 reported having a job category below their professional level (Table 19, Appendix B). Adequate employment levels or codes are far more common among midwives in “midwifery model” programs than in “midwife employment” sites. Those hired below their professional category were most often working at the primary care level.

Being hired below category, usually as general nurses, is more frequent among nurse midwives than among technical midwives, most likely because there is an official code for technical midwives and none, as yet, for perinatal specialist nurses (Tables 16 and 17, Appendix B). Midwives working in programs that began before baseline are also more likely to have been hired below their level as compared to those working in new programs, which suggests there has been a slight improvement in labor conditions (Table 18, Appendix B).

---

41 At the time of Baseline in 2015, only 15 sites were visited, in 2018, four additional sites were found that had existed in 2015. Little data are available on those sites but they are included in the baseline total.

42 Two of these sites are private but work closely with the public health system.

43 111 attend births in public institutions while six attend births in CIMigen, which is a private clinic closely networked with public institutions.

44 The sample of midwives had a larger percentage of technical midwives than found in the total population of 255 midwives. (See Table 13, Appendix B for the sites where these 117 midwives are employed, Table 14 for the type of midwife by site, and Table 15 for their general characteristics).
Indicator 15: Description of deployment sites including use of high-quality midwifery practices and quality of program

Finding: A larger proportion of the current sites employs midwives in integrated midwifery model settings that emphasize evidence-based practices than at baseline. Setting (determined by model and level of care) is an important determinant of the kinds of practices that midwives use with their patients, with primary and intermediate levels favoring better midwifery practices.

Among the 19 sites at baseline, the evaluators classified ten as institutionalized midwifery programs that emphasized and supported evidence-based practices of a “midwifery model.” The remaining sites were institutions in which midwives had been hired in an isolated manner without a midwifery-friendly created intentionally by the institution. In the midwifery model sites, three quarters of the midwives were nurse midwives. By contrast, in isolated midwife employment sites, almost half of the midwives were technical midwives and a similar proportion were “pasantes” (Table 20, Appendix B).

The baseline findings showed that the setting in which midwives are employed determines to a large extent whether or not they can provide high quality care using practices based on evidence, human rights and cultural sensitivity. A supportive, midwifery-friendly context encourages evidence-based practices even if one’s training did not, and vice versa, in the case of isolated settings that limit their utilization, as Figure 1 (Appendix B) shows. Accordingly, reliance on highly skilled midwives will only be associated with high quality, women-focused care where enabling environments are available.

Further, findings at baseline showed that the clinical environment at different levels of care – another key determinant of setting - had enormous influence on whether service providers could apply evidence-based practices during labor and delivery. Both physicians and midwives who worked at the primary level consistently provided more evidence-based obstetric care than those who worked at intermediate level facilities; and even more so than those who worked in general hospitals.

Women’s experience corroborated these differences at baseline: Women who received care at the primary level from midwives and doctors more often experienced evidence-based practices than did women who were cared for at intermediate or general hospital levels.

Of the 36 sites found in 2018, one-third had been operative at baseline and two-thirds are new, while a few of the original baseline sites no longer employ midwives (Table 12, Appendix B). There is a higher percentage of midwifery model sites in 2018 than at baseline. In the midwifery model sites, over half of the midwives are nurse midwives with few technical midwives. In contrast, in the midwife employment sites, more than half of midwives are technical midwives (Table 22, Appendix B).

In 2018, a slightly higher proportion of sites are at the primary level than at baseline (Table 21, Appendix B) and over half of the midwives work at the primary level, with specialized nurses being the largest proportion of them. The proportion of technical midwives, while small, is higher at secondary and tertiary levels of care, i.e., in hospitals.
### Midwifery employment sites by level of care

<table>
<thead>
<tr>
<th>Level of Care</th>
<th>Baseline</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>7 (37%)</td>
<td>17 (47%)</td>
</tr>
<tr>
<td>Intermediate</td>
<td>4 (21%)</td>
<td>6 (17%)</td>
</tr>
<tr>
<td>Secondary</td>
<td>7 (37%)</td>
<td>10 (28%)</td>
</tr>
<tr>
<td>Tertiary</td>
<td>1 (5%)</td>
<td>3 (8%)</td>
</tr>
<tr>
<td>Total sites:</td>
<td>19</td>
<td>36</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of midwives employed 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td># midwives employed 2018</td>
</tr>
<tr>
<td>160 (63%)</td>
</tr>
<tr>
<td>119 (74%) specialized nurses</td>
</tr>
<tr>
<td>27 (17%) general nurses &amp; pasantes</td>
</tr>
<tr>
<td>14 (9%) technical midwives</td>
</tr>
<tr>
<td>53 (21%)</td>
</tr>
<tr>
<td>29 (55%) specialized nurses</td>
</tr>
<tr>
<td>21 (40%) general nurses &amp; pasantes</td>
</tr>
<tr>
<td>3 (6%) technical midwives</td>
</tr>
<tr>
<td>42 (16%)</td>
</tr>
<tr>
<td>19 (45%) specialized nurses</td>
</tr>
<tr>
<td>13 (31%) general nurses</td>
</tr>
<tr>
<td>10 (24%) technical midwives</td>
</tr>
<tr>
<td>255</td>
</tr>
</tbody>
</table>

The same relationship between setting and the use of evidence-based practices was found in 2018 as had been found in 2015. More of the midwives interviewed (60%), who work in midwifery model sites reported using recommended practices as compared to colleagues working in midwife employment sites (Table 23, Appendix B). Higher proportions of midwives used recommended practices at the primary level, slightly fewer did at the intermediate level and even lower proportions in hospitals in all stages of the continuum of care. It is still important to note that between 30 and 40% of midwives in midwifery model and primary level care services did not report consistent use of evidence-based practices during labor and delivery.

With care of newborns, at all levels of care a majority of midwives reported high levels of compliance with evidence-based practices. The exceptions are two interventions that midwives should avoid (nose and mouth aspiration and prophylactic use of antibiotics), but that half or more of them continue performing at all levels of care.

In general, women who received midwifery care at the primary level report higher levels of evidence-based practices in comparison with those attended at basic community hospitals (intermediate) and secondary level hospitals (see Table 30 and Table 31, Appendix B). These results confirm that primary and sometimes intermediate levels of care are better suited for high-quality, evidence-based midwifery practice, provided they guarantee immediate access to transport and quality emergency care when required.

**Additional finding:** Employment sites continue to be plagued by low productivity and challenges related to referral when patients develop complications.

At baseline, institutionalized midwifery programs existed that could serve as models worthy of replication, but preferably after a set of challenges had been confronted and rectified. Even the more established sites had low productivity, poor systems for referring women who develop complications, and inconsistent adherence to evidence-based practices. Referral rates of women during pregnancy and in labor were much higher than expected in more than half the sites. Even in institutionalized midwifery programs, midwives often confronted lack of awareness, distrust, and hostility from physicians and some general nurses, who lacked clarity about the role of midwives, whether they can attend normal deliveries at the primary level or whether they can officially refer patients out in case of need.

---

45 See details in Table 24 for prenatal care, Table 25 for labor and delivery, and Table 26 for postpartum and neonatal care. For individual practices see Table 27 Prenatal, Table 28 Labor & Delivery; Table 29 Postnatal and Neonatal Practices, Appendix B.
In 2018, productivity and referral problems continued in many sites. The proportion of sites that refer a high percentage of cases is only slightly better than it was in 2015 (Table 32, Appendix B), but nevertheless half of women who are pregnant or in labor are still referred to a higher level with more medicalized care. This is far higher than the 15% of complications that the World Health Organization suggests as typical, pointing to significant loss of opportunity for midwifery models of care. Even among midwifery model sites, referrals were higher than they should be and most midwives believe they could attend more births. Explanations given were: few women come to the institution, we refer out too many patients, and we do not have midwives in every shift. In several cases, medical personnel and some midwives expressed concerns and even fear that the midwives were not able to deal with complications given either the distance to adequate backup services or lack of confidence in their abilities. In these cases, they tended to refer patients out, unless they were “very, very low risk.”

In other cases, the risk assessment check-list being used (at baseline and in 2018) required referrals in cases that had no developed pathology but fulfilled some relative demographic characteristic, such as age under 20 years, unplanned pregnancy, etc. In several sites, these risk assessment tools are being revised to enhance their sensitivity, specificity and accuracy.

Staff from one of the oldest public midwifery model sites in the country and the one most often referred to as a model to follow reported they had had visitors from many states as well as several other countries. Officials who visited and were interviewed mentioned the negative repercussions of the low productivity they observed at that site.

Most midwives worked in an institution without surgical facilities, making referrals more likely. Only one-third of them reported having total support from the referral institution; almost half reported partial support and the rest perceived partial or absolute rejection. The reasons given for lack of support include oversaturation of the referral hospitals and lack of understanding of midwifery care:

*The first reaction we get is always rejection—they think we didn’t do the diagnosis well....*

*It can be difficult to refer a patient (because) the hospitals don’t have space or the ambulance doesn’t have gasoline....*

*They don’t believe in the model so they blame us for complications. It seems like they think we are just creating more work. They don’t answer our phone calls or they question us a lot.*

*When the woman arrives already stabilized they deny that she is experiencing complications. They don’t think nurses have the ability to care for pregnant women.*
Among directors interviewed, half spoke of challenges related to referrals such as rejection by the referral institution due to lack of space, equipment, and human resources. Inadequate transportation and long distances were additional impediments. Directors mentioned rejection and lack of knowledge of the midwifery model, as well as triage that results in too many women being sent to the referral institutions.

**Indicator 16:** Compliance by midwives with evidence-based practices

**Finding:**
Most professional midwives of all types report using high levels of evidence-based practices and practices that conform to Mexican normativity throughout the continuum of care, with the persistence of a few practices that should be avoided. Important deficiencies persist in terms of their knowledge of obstetric and neonatal emergency care and in some newborn care practices.

At baseline, professional midwives reported engaging in more evidence-based practices during labor and delivery than medical personnel. Differences were found among the types of professional midwives, with perinatal specialist midwives reporting more evidence-based practices than technical midwives.

Midwives provided services throughout the continuum of care at baseline. The majority of professional midwives followed standard normative procedures during care, even more so than physicians. Nevertheless, there was room for improvement, especially in the area of prenatal practices (Tables 33a and 33b, Appendix B). Many midwives had little experience with the management of obstetric and/or neonatal emergencies.

In 2018, more midwives attended patients throughout the continuum of care than at baseline (Table 35a, Appendix B), except that fewer midwives interviewed in 2018 provided prenatal consultation than at baseline (Table 33a, Appendix B). While midwives are working throughout the continuum of care, attention is needed to ensure their services begin during pregnancy, as recommended by the WHO.

Regardless of their original training, in 2018, all types of midwives reported higher levels of many evidence-based practices during labor and delivery. However, some practices that should be avoided are still being used especially in hospital settings. Midwives have slightly lower levels of compliance in three practices: routine use of IV during labor; electronic fetal monitoring; and nose and mouth suction of newborns. Other non-recommended practices continue, although with less frequently than at baseline: 13% of midwives reported that they do not allow a woman to choose her birth position; 5% that they use the Kristeller maneuver; and 7% that they carry out manual exploration of the uterine cavity without anesthesia. This is an indication of how deeply rooted these practices are in institutionalized obstetric care in Mexico (Table 34a).

Overall, during labor and delivery, 55% of professional midwives in 2018 reported they use at least 20 of the 22 evidence-based practices (Table 39). This indicates that the remaining 45% of professional midwives do not consistently use evidence-based practices during labor and delivery.

In other stages of the continuum, midwives of all types are providing high-quality care that is consistent with recommended evidence-based practice and Mexican norms. The proportion of midwives who report using recommended practices during prenatal and postpartum consultations is markedly higher.

---

46 See Tables 33a, 33b, 34a, 34b, 35a and 35b in Appendix B.
47 In 2018, the evaluators did not interview physicians so were unable to compare practices of midwives and physicians.
than at baseline (Tables 33b and 35b). In neonatal care, there is a window of opportunity to continue improving the quality of attention provided by midwives by discontinuing the routine use of nose and mouth suction and prophylactic use of antibiotics on newborns (Tables 35a and 40).

In 2018, there were fewer differences among type of midwives than at baseline. Performance around evidence-based practices was high and fairly consistent for all types of professional midwives along the continuum of care.  

One exception is that midwives demonstrated low levels of understanding of how to manage situations of severe preeclampsia, obstetric hemorrhage, or neonatal hypoxia. These deficiencies were noted at all levels of care (Table 49) and among all types of midwives (Table 48). While midwives are dedicated first and foremost to attending normal births, they must be able to detect, stabilize and refer women and/or their babies when complications arise.

Women who receive midwifery services in labor and delivery generally reported having received care in accordance with evidence-based practices at relatively high levels, although consistently lower than what was reported by the midwives (Table 43 and 46). However, women reported that they were subjected by their attending midwives to four common hospital birth procedures that are not supported by EBM (Table 43), indicating there is still important work to be done to ensure that professional midwives are fully applying evidence-based practices.

At the other stages on the continuum of care, women confirm high levels of evidence based and normative practices at prenatal, postpartum and neonatal care (Tables 42 and 44), and across all types of midwives (45 and 47).

Indicator 17: Women’s level of satisfaction with care provided by midwives
Finding: Women service users continue to express high levels of satisfaction with the care they receive from midwives, especially compared to care received from physicians

At baseline, women attended by midwives were consistently more satisfied than women who were attended by physicians with the care they received during pregnancy, childbirth and postpartum. But again, context matters, this time influencing women’s perceptions of good care: three quarters of the women cared for at primary care rated their care as excellent, compared to 59% of the women cared for at intermediate level and 28% at secondary level.

Women recognized the difference between women-centered midwifery care and highly medicalized hospital care. They preferred the former, citing advantages such as better care in all aspects such as good treatment, instilling greater trust and security, and better explanations.

At baseline, women service users reported having received clear and friendly responses to their questions or concerns, and two thirds having received excellent treatment. Among those who had given birth more than once and had been attended by medical personnel as well as midwives, 63% said

---

48 See Tables 36, 38, and 40 for practices reported by different types of midwives during prenatal, labor and delivery, postpartum and newborn care and Tables 37, 39 and 41 for the proportion of midwives by type who reported high percentages of compliance in prenatal, obstetric and postnatal care. See Tables 45, 46 and 47 for practices during the continuum of care that women service users reported they received by different types of midwives.
midwives offer no disadvantages compared to doctors. Only 5% said they saw no advantage to midwifery care.

In 2018, eight of 11 questions posed to women service users about the quality of the care received during labor and birth elicited positive answers with percentages above 90% (Table 50). A greater number described the care as excellent than at baseline, and almost all said they would give birth again with the same midwife. There were no significant differences among types of midwife (Table 51), nor in level of care where the women received attention (Table 52).

In 2018, three quarters of women who had given birth more than once, said the care given by midwives had no disadvantages (Table 53), and almost all saw advantages to receiving care from a midwife. Of the same women, the majority said doctors offer no advantage over midwives and most mentioned a number of disadvantages (Table 54).

More generally, while high percentages of women service users reported having received care during labor and birth that was consistent with evidence-based practices, these percentages were consistently lower than those reported by midwives. It is important to reiterate that the women interviewed were not necessarily attended by those midwives who were interviewed. Nonetheless, the systematic difference may point to a methodological weakness inherent in a “self-reporting” instrument. That is to say, the midwives may have over-reported their use of evidence-based practices, focusing more on what they should be doing rather than what they were actually doing.

5.5 Theory of Change at the State Level

Given the variation in conditions, needs and opportunities in the country, it is no surprise that the Theory of Change played out differently in each location. The evaluation documented states’ midwifery experiences using five variables that correspond to the Initiative’s Theory of Change and thematic priorities:

- **Commitment or political will among state officials** – State experiences support the hypothesis that broad support or buy-in for professional midwifery among state officials can be a key factor in the quality and sustainability of an initiative, the ability to secure state funding, and overcoming opposition from medical providers. Three states (Guerrero, Morelos, Veracruz) illustrate the benefits of strong buy-in from state health officials. While variations are always present, commitment in these states stemmed from the highest levels of authority. As a result, women-centered or midwifery approaches are featured in state maternal health policy (Guerrero and Veracruz) and, in one case, budget (Guerrero).

In other states (Mexico City, Mexico State, Tlaxcala, Chiapas, Tabasco), midwifery initiatives were initiated by committed and well-placed officials within state government, in some cases with support from national-level actors or multilateral agencies, but broad political commitment is not yet evident. Mexico State has one very well-established but neglected program, two existing programs that seem comprehensive but have very few patients, and several new deployment sites that face significant challenges to attract sufficient pregnant women. The state has given less attention to building acceptance for midwifery models of care among the broader medical establishment, resulting in uneven support, low volume, and deficient referral mechanisms. Tabasco is a relatively new program that has benefitted from careful planning, research and documentation.
It remains to be seen whether the level of political support will be sufficient to help this pilot project survive the 2019 state government transition.

- **Role of civil society champions** – While civil society support is not needed for professional midwifery experiences to emerge, the state analysis shows that these actors can play a critical role by encouraging officials toward more women-centered models of care and providing information or sensitization that enhances acceptance or legitimacy. In many states, national CSOs were playing this role, although three states (Guerrero, Morelos, Chiapas) also had a strong presence of state-level CSO actors. The effectiveness or influence of civil society champions was most apparent in two states (Guerrero and Morelos) where collaborative actions with local leadership were prioritized.

In Mexico City, civil society actors are numerous but have focused their efforts at the national level rather than promoting professional midwifery in this state. Other states have launched successful midwifery initiatives without civil society partnerships but might arguably benefit from having additional voices of support to survive political transition (Tabasco), or to generate demand and ensure continued emphasis on women-centered models of care (Mexico State).

- **Availability of trained midwives in state** – The presence of in-state education programs proved to be an important variable for states that do not have adequate access to the type of midwives they need. Several states with high levels of commitment or enthusiasm commented, for example, that they would like to expand on their experiences but simply cannot find enough midwives. This is particularly the case in states that have a preference for technical midwives (Puebla, Tabasco, Veracruz), or where diverse midwives are needed.

- **Deployment sites that enable women-centered, evidence-based practices** – States with one or more midwifery model sites that describe their programs as emphasizing women-centered care include Chiapas, Chihuahua, Colima, Guerrero, Mexico City, Mexico State, Morelos, Queretaro, Quintana Roo (one hospital), Tabasco, Tlaxcala and Veracruz. Some of these sites are relatively new, however, and show moderate or low levels of quality of care. States in which employment of midwives has been prioritized over model of care include Puebla, Quintana Roo (one hospital), and San Luis Potosi where practices are more highly medicalized.

- **Strong quality of care** – The state-level experiences show that quality of care is best in places where midwifery models have broad and informed supporters with a clear vision of midwifery care as being evidence-based women-centered care. Three states with midwifery model sites (Guerrero, Mexico City, Mexico State) showed high quality of care as determined by consistent use of evidence-based practices. Another four states with midwifery model sites (Chiapas, Tlaxcala, Tabasco, Morelos) showed moderate levels of EBPs and thus have some ways to go to fulfill the vision they profess. The remaining midwifery model sites have farther to go since the midwives there reported uneven use of recommended EBPs. These cases suggest the need for consistent visionary support and on-going education and encouragement to create truly enabling conditions.

One state (Guerrero) has shown advances in all five areas. This state is one of the country’s poorest rural indigenous states with enormous cultural, geographic and economic challenges. The combination of support from state government officials, active and coordinated pressure from civil society, and educational programs for different types of midwives has led to important advances that include high quality care provided by technical and nurse midwives in the state. A convergence of factors is less
complete but also apparent in two other states (Mexico City and Morelos) that are wealthier and more developed, demonstrating that midwifery can thrive in markedly different contexts.

In six states (Chihuahua, Colima, Puebla, Queretaro, Quintana Roo and San Luis Potosí), professional midwifery experiences are incipient and, in most cases, inspired by national Health Ministry or multilateral agency initiatives. These efforts are more isolated from the broader national midwifery movement and have little or no civil society involvement. There are few midwives in these states, often one per institution. It is too early to know whether the experiences will take root by stimulating local enthusiasm and commitment to continue or build upon the experiences. In 2018, the quality of care reported in these states is lower and more medicalized than that in the more well-established programs in other states.

One final state (Oaxaca) with significant maternal health challenges has two small but innovative educational programs but did not make progress between baseline and 2018, despite being a priority state for the Initiative. The Health Ministry, busy with many other crises, did not take up the theme of professional midwifery within its agenda, nor has civil society taken up the mantle. To date there are no sites that employ professional midwives in the state. Without leadership from the state Health Ministry it appears that very little can happen, especially without a federal directive that might tip the balance towards more active engagement by state-level officials.

REFLECTIONS

6. INTEGRATING THE FINDINGS

6.1 Elements of Success

Important advances have taken place since baseline to expand the presence of professional midwives providing high-quality obstetric and neonatal care in Mexico’s public health system. The potential for midwifery to be institutionalized seems greater today because of the growing number of training programs, midwives and midwifery sites throughout the country; a larger and more influential community of midwifery champions; multiple collaborative efforts to disseminate information and sensitize health personnel to midwifery models of care; increased awareness and action by public authorities; and an emerging dialogue among state-level actors about what works. These advances contribute to momentum around the country, with the most significant progress seen in locations where the Initiative’s four thematic areas, and the corresponding efforts of its partners, have converged.

In addition to confirming the importance of synergy among the four areas of support, as envisioned in the Theory of Change, the findings point to several factors or elements that may enhance success:

PREPARATION OF TERRAIN—In the words a key expert, it “is important to prepare the soil before planting the tree.” Indeed, there were several examples where states invested significant effort in tilling the soil to foster greater acceptance of their midwifery programs. For Veracruz, this meant mandatory sensitization courses for all health system personnel, from the top political tiers down to the operational level. Multiple actors helped prepare the terrain in Guerrero, including numerous local, national and international civil society organizations working in concert with state government leaders to expand acceptance and integration of not one but all types of midwives. On the other hand, Mexico State has the largest number of midwifery model sites but did little to foster cultural change or overcome
resistance by other health system personnel, or to disseminate information about midwifery services and attract more women, thus limiting the potential of their midwifery sites. The Initiative recognized the importance of sensitization and supported multiple efforts to enhance acceptance among public officials and health system personnel in targeted states.

**INTEGRATED MODELS AND ENABLING CLINICAL SETTING**—The data show that the best maternal health outcomes are seen in places where midwives are integrated into teams of practice with clear and complementary roles. For this reason, preparing the terrain must include efforts to demonstrate how midwives can enhance the effectiveness of the larger team without displacing other personnel. The results also confirm the importance of setting or environment for achieving quality of care. Improved quality of care does not happen automatically; it requires enabling environments, good training, supportive staff, and continuing education. In order to be effective, midwives need to work in a supportive system. The Theory of Change did not focus on the clinical level or promote a particular model of practice, but the Initiative did help strengthen existing and emerging models indirectly through extensive support for learning, information exchange, and recognition of best practices.

**POLITICAL COMMITMENT**—State level mandates can go a long way by establishing midwifery as part of state maternal and neonatal health strategy, defining a roadmap for implementation and establishing an expectation of compliance. But consensus suggests that the long-term goal of institutionalizing professional midwifery in Mexico’s public health system will ultimately require a federal mandate that situates midwifery as a priority, with corresponding legal support or norms; incorporation of the concept in Health Ministry strategies; policies and programs that reflect best practices; adequate budget allocations; and modification of regulatory requirements that currently impede progress.

**DIVERSE MIDWIVES FOR DIVERSE SETTINGS**—Mexico is a highly diverse nation both culturally and geographically. This diversity is marked, however, by extreme inequality of income and education linked to ethnicity, gender, and geography. Mexico’s diversity—in the context of inequality—must be honored if midwifery is to be accepted in the regions that need it the most. In the Initiative, the importance of diversity was recognized and fostered through grants to organizations representing the voices of multiple types of midwives.

### 6.2 Advances on Cross-Cutting Concepts: Momentum, Sustainability, Tipping Point

**6.2.1 To what extent is there momentum toward broad institutionalization of midwifery in Mexico?**

The work of numerous midwifery champions described above has indeed created momentum in specific settings where the efforts of multiple actors have converged. At the national level, the number of programs is still growing, more students are being trained, and insertion sites are expanding in number and geographic reach. Health care practitioners and decision makers are learning about midwifery care and, in some cases, seeing what that looks like in practice, leading them to be more supportive.

The limits of the momentum are related to scale. Pro-midwifery efforts are still relatively isolated on a national scale and in the health system, where professional midwifery is not yet widely understood or recognized as a viable or desirable strategy for improving maternal and neonatal healthcare. Maintaining and expanding the momentum going forward will require even broader communication of current experiences to continue igniting interest, enthusiasm and experimentation. Multilateral agencies such as UNFPA and PAHO, who continue to be committed to pro-midwifery objectives, can play a key role.
6.2.2 How sustainable are these advances?

Important advances have been made in Mexico in integrating professional midwifery into the public health system, but the sustainability of these experiences is by no means assured. In almost all states, midwifery champions or public officials voiced concerns about upcoming political transitions and the challenges or opportunities they will bring. Ensuring the longer-term sustainability of these experiences, and continuation of the commitment to exploring midwifery models of care at the state and local levels, would benefit from a federal mandate, even broader state level buy-in, and the inclusion of midwifery in maternal health care budgets.

6.2.3 Has a tipping point been reached?

Some states seem to be approaching tipping points where progress is less likely to be reversed at the cultural level through broad scale shifts in the opinions, expectations, behaviors of health care officials and practitioners. At a national level, the National Human Rights Commission recently moved the issue of obstetric violence to center stage in legal and human rights discourse and practice in Mexico. This shift could provide a motor that leads to actions to improve quality of maternity and neonatal care, as is happening in other countries. At minimum, it seems likely that there will be less tolerance for non-compliance with evidence-based practices and official norms that are consistent with midwifery practice. Looking forward, a federal mandate would go a long way to consolidate these advances, moving the country toward a tipping point in which professional midwifery could become a permanent feature of the maternal health care system.

6.3 Conclusions

Important advances have been made since baseline in all areas of the Theory of Change, with encouraging momentum towards broader acceptance of professional midwifery, new employment opportunities, greater familiarity among policy makers, increased collaboration among advocates, and growing potential for training highly qualified professional midwives.

Extensive information is now available—far more than in 2015—to inform or guide ongoing efforts to advance professional midwifery throughout the country, and to encourage incoming state and federal leaders to embrace midwifery as a key component of strategies to solve the country’s maternal health needs. In addition to generating enthusiasm for professional midwifery, this information offers roadmaps and lessons learned about what does or does not work in the highly diverse contexts that characterize Mexico.

Midwifery advocates in Mexico now have clear evidence that professional midwives are capable of providing high quality, woman-centered obstetric services throughout the continuum of care—including labor and delivery—when they are employed in supportive settings that embrace a midwifery model of practice and that ensure prompt and fluid referrals in case of complications. This evidence is critical for overcoming the information gap and misperceptions that hampered progress just three years ago.

Professional midwifery is more likely to be viewed today as a promising solution to help satisfy Mexico’s need for high-quality obstetric care—especially in remote and impoverished settings—but it is most promising when certain elements are in place. If political will is lacking or inconsistent, if there are not enough qualified midwives, if physicians and other personnel are unsupportive, or women are unaware
of midwifery services as an option, midwifery models of care may be unable to realize their full potential. A few states are providing examples of what can be accomplished when these components come together successfully. Significant momentum is apparent, with impressive progress in some states and expressed interest from the incoming government, marking progress toward broader integration of professional midwifery into official maternal health strategy. The Initiative is contributing in important ways to this momentum by bringing professional midwifery into the conversation around maternal health strategies in Mexico.