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### Publication Date

2016

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# Professional Midwifery: Learning from the Past and Present to Inform the Future of Maternal Health Services in Guatemala

By

Anna Leigh Summer

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Public Health

in the

Graduate Division

of the

University of California, Berkeley

Committee in Charge:

Professor Sylvia Guendelman, Chair

Professor Dilys Walker

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Spring 2016

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# Abstract

Professional Midwifery: Learning from the Past and Present to Inform the Future of

Maternal Health Services in Guatemala

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Professor Sylvia Guendelman, Chair

Guatemala has an unacceptably high maternal mortality ratio (MMR) of 140, and improvements in this area have been slow. Furthermore, gross inequalities in health outcomes exist within its population, with over 70% of maternal deaths in Guatemala occurring among indigenous Mayan women. Mayan communities have been historically marginalized, and most Mayan women prefer the services of traditional birth attendants (TBA). As such, a disconnect exists between the formal and traditional health sectors in Guatemala, contributing to poor maternal health outcomes. It is widely agreed that professional midwifery is an important component of safe motherhood strategies that can reduce maternal morbidity and mortality. Today the Guatemalan Ministry of Health is reintroducing midwifery for the first time since 1960. Given the potential professional midwifery has to address the obstetric care needs of Mayan women and bridge the gap between the health sectors in Guatemala, formative research is needed at the outset to inform the design and implementation of this program.

This dissertation aims to inform future directions for professional midwifery in Guatemala by assessing and analyzing historical policies and current perspectives and presenting context-specific recommendations for the future. The first paper looks to the past to consider how international and society-centered forces influenced the creation of policies in Guatemala regarding birth attendance since the signing of the Peace Accords in 1996 up to the reintroduction of midwifery. Next, the second paper elucidates the misperceptions, attitudes and expectations about the addition of midwifery to the healthcare system by Guatemalan physicians, nurses, midwives and TBAs today, identifying potential threats and facilitators to this strategy's success in Guatemala. Finally, the third paper proposes recommendations for the future, considering identified impediments to midwifery's capacity for sustainability. This dissertation provides findings that can improve the design, implementation, monitoring and evaluation of the professional midwifery strategy in Guatemala, and can inform program and policy decisions to implement this strategy in Guatemala, Latin America and beyond.

## Dedication

To my mother, Lori, who loves and encourages me endlessly. To my father, Tom, who instilled in me a spirit of adventure and curiosity about the world. To my sister, Amy, my dearest friend, now and forever. To my brothers, Robbie, Jacob, and Joel, for the laughter and joy they bring to my life. And to Ray for his boundless support and unwavering love.

And to the women of Guatemala, for whom this work is done, who continually demonstrate to me what strength and resilience really means.

# Acknowledgements

My deepest gratitude goes to my dissertation committee, for their support and guidance throughout my time at Berkeley. I would like to thank Dr. Sylvia Guendelman for assuming the role of dissertation chair, taking on that significant responsibility when I was halfway through this program. I do not take this lightly. Dr. Patricia Baquedano-López has been a source of inspiration throughout this process, encouraging me to continue this important work and lending her profound insights. Dr. Dilys Walker has been a pillar of strength, comfort, encouragement, and motivation since the moment we first met and conceived of this dissertation work. She has played the role of mentor unlike no other. I know she will be a lifelong mentor and colleague, and I am endlessly grateful for her support.

Other faculty members at Berkeley have also played special roles. Dr. Jodi Halpern has fostered in me a deep appreciation for the importance of ethics in public health. Throughout my time at Berkeley, I can truly state that Dr. Halpern has also become my friend, for which I am very thankful. Dr. Cheri Pies steadily offered her support to me from my first interview at Berkeley until now. I am grateful to Drs. Ndola Prata and Malcolm Potts who provided me with the fellowship at the Bixby Center for Population, Health and Sustainability that provided my funding for the duration of my tenure as a DrPH student. I also thank Lori Freedman for her tireless support during my qualitative analysis process.

I thank the Center for Global Public Health and the Institute for International Studies at Berkeley, both of which provided funding to support this research. My collaborators in Guatemala also deserve a heart-felt thank you. I am grateful for the Principal Investigator Dr. Edgar Kestler of *Que Vivan Las Madres* for working together with me to create and conduct this important research. He made entrée into all my field sites possible. I thank the midwives in Guatemala Lucia Lopez Morales and Anabel Garcia Valazquez for their tireless support in the data collection process, and Angela Maria Lopez Alvarado and Carlos Eduardo Thomae del Valle for their assistance with data analysis in Guatemala City. I also thank Abigail Gutmann-Gonzalez for her key role in data analysis in Berkeley, California.

Special thanks are due to the many people in Guatemala who were graciously willing to speak with me, sharing their time and experiences for the sake of this research.

I cannot adequately thank my DrPH cohort, “The Sensational 7.5.” We have walked through this journey together from the beginning, sharing laughter and tears. Thank you to Cassandra Blazer, Vicky Gomez, Michael Harvey, Leena Singh, Carly Strouse, and Kelechi Uwaezuoke, brilliant scholars and steadfast friends. They carried me through the DrPH program. I must also thank Summer Starting, fellow DrPH student and sure to be life long very dear friend. Thanks to Courtney Henderson and Carinne Brody, two DrPH students who had gone before me, forging the trail and lending their friendship along the way. A very special thanks goes to Rebecca Braun who was a life saver in the final writing stages, offering much needed feedback, calming words of wisdom, and motivation to finish well.

Lastly, I owe an immeasurable debt of gratitude to my grandparents, parents, my siblings, and Ray. They have loved, encouraged, and motivated me every step of the way, believing in me even when I did not. I thank them all from the bottom of my heart.

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# Chapter 1. Introduction

The reduction of maternal mortality has been a global health priority since the launch of the Safe Motherhood Initiative in 1987.<sup>1</sup> This objective was reinforced in 2000 with the creation of the Millennium Development Goals aiming to decrease maternal deaths by 75% between 1990 and 2015.<sup>2</sup> Maternal mortality is defined as deaths due to pregnancy, childbirth, or within 42 days of childbirth; over 99% of these deaths happen in developing countries.<sup>3</sup> Hemorrhage, infection, hypertensive disorders (toxemia/eclampsia), obstructed labor and unsafe abortion are the leading causes of maternal death, all of which can be addressed with appropriate medical care in “an enabling environment or health system capable of delivering appropriate emergency obstetric care for all women who develop complications during childbirth.”<sup>2,4</sup> However, who is considered skilled to deliver that care has been a topic of debate ever since the launch of the Safe Motherhood Initiative.<sup>5-9</sup>

To address maternal mortality, the current World Health Organization (WHO) recommendation is that all pregnant, delivering, and postpartum women access basic emergency and comprehensive obstetric care with the assistance of skilled birth attendants (SBAs). SBAs are defined as midwives, physicians, nurses or other health care professionals that provide care during pregnancy, childbirth, and the postpartum period, and are trained to attend normal deliveries and diagnose and refer complications.<sup>6</sup> This recommendation excludes traditional birth attendants (TBAs), highly valued community members who provide obstetric care and usually acquire their skills through apprenticeships with other TBAs.<sup>10</sup> Globally, about 45 million women every year give birth at home without any kind of skilled attendant, with roughly two-thirds of these women assisted by a TBA.<sup>7</sup> TBAs continue to be the birth attendant of choice for many women around the globe due to their affordability, accessibility and cultural sensitivity.<sup>1</sup>

This dissertation will explore maternal health and birth attendance in Guatemala, a country with an unacceptably high maternal mortality ratio (MMR) of 140 and gross inequalities in health outcomes within its population. The indigenous Mayan communities constitute approximately 38% of the population and consistently experience higher MMRs than the Ladino majority, as well as other health and economic disparities.<sup>11,12</sup> It is estimated that the MMR among indigenous women is twice that of non-indigenous women (163 versus 77), and over 70% of maternal deaths in Guatemala occur among indigenous women.<sup>13</sup>

Approximately 70% of births in rural indigenous Guatemala still take place outside the formal health care sector with the assistance of TBAs.<sup>14</sup> Mayan women prefer TBAs for various reasons such as limited numbers of health facilities, inadequate training of health workers, insufficient transportation systems, and cultural barriers between the indigenous peoples and the Ladino majority.<sup>12</sup> In Mayan culture it is believed that TBAs were destined from birth to carry out this role in their community. For this reason, TBAs preserve centuries-old traditions in obstetric care which Mayan women often prefer, such as allowing for vertical delivery positions, conducting ritualistic burials of the placenta, providing various herbal teas during labor and delivery, and the use of a *temescal*, or sweat bath, following birth. Therefore, in Mayan communities, the TBA's role is not only that of a health care provider; hers is a highly valued spiritual role as well.<sup>15</sup>



In addition to their preference for 'TBAs' services, many Mayan people distrust government services – including the health sector – as a result of the violent thirty-six year civil war.<sup>16</sup> In 1996, Guatemala signed the Peace Accords to end the prolonged conflict between insurgent Guatemalans and the United States-backed Guatemalan military that caused the deaths or disappearances of over 200,000 Guatemalans, most of whom were indigenous Mayans.<sup>17</sup> Many Mayan communities experienced rape, torture, and countless other human rights violations.<sup>18</sup> Historically traditional providers of care were regulated by the government and often killed for their alleged links to the guerillas. The Guatemalan government often claimed that traditional healers were providing health care and medicines to guerillas, using this as justification for the murder of these practitioners.<sup>19</sup> For these reasons, a disconnect between the traditional health care system and the formal health system continues today, contributing to poor maternal health outcomes for Mayan women.

Despite the global promotion of SBA, only about half of the births in Guatemala are attended by a skilled provider, with that rate significantly lower among indigenous women.<sup>20</sup> The MMR of a country is a telling indicator of the utilization and quality of that country's health system, and Guatemala is no exception.<sup>21</sup> As such, Guatemala has received international attention for its failure to address maternal mortality and increase SBA in its population. In an effort to bridge the gap between the formal and traditional health sectors and improve the health of Mayan women, the MOH is re-introducing professional midwives into their health system for the first time since 1960.<sup>12</sup>

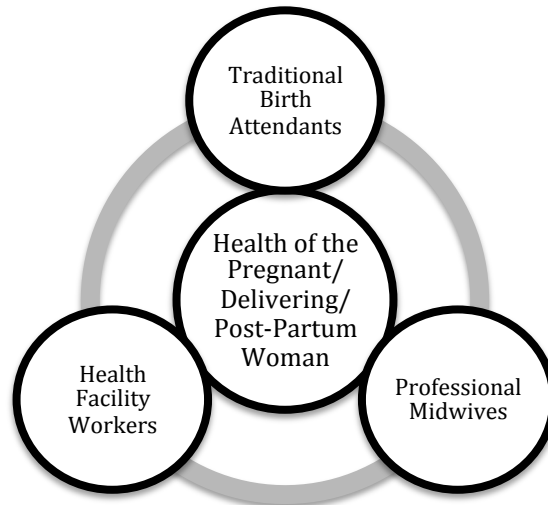
The International Confederation of Midwives (ICM) defines a midwife as the following, “A person who has successfully completed a midwifery education programme that is duly recognized in the country where it is located and that is based on the ICM Essential Competencies for Basic Midwifery Practice and the framework for the ICM Global Standards for Midwifery Education; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title ‘midwife’; and who demonstrates competency in the practice of midwifery.”<sup>22</sup> A professional midwife is trained to practice in both the community and the health facility, and can do so without the supervision of a physician.<sup>22</sup> By design, professional midwifery utilizes both evidence-based biomedical techniques and traditional midwifery skills to address the full spectrum of women's needs during pregnancy, delivery, and post-partum.<sup>23,24</sup>

The re-introduction of the professional midwife to the Guatemalan health system could have significant implications for the maternal health of rural, indigenous Mayan women, as there is increasing recognition that professional midwives are essential to the reduction of maternal and newborn deaths.<sup>25</sup> *The State of the World's Midwifery in 2014*, a report produced by the UNFPA, the ICM and the WHO, stated that professional midwives are crucial to overcoming barriers to accessibility, acceptability, availability, and quality in health services.<sup>25</sup>

A recent series of four papers in *The Lancet* demonstrated professional midwifery's global impact on maternal health.<sup>26-30</sup> Professional midwifery has contributed to improvements in maternal and child health outcomes, specifically through reduced maternal and neonatal mortality and morbidity, preterm births and stillbirths, decreased numbers of unnecessary interventions, and overall improvements in reported psychosocial and public health outcomes. In addition to these benefits, these papers outline that professional midwifery can lead to a more efficient use of resources provided the midwives were trained, licensed and

regulated. For these reasons, and others, the series recommends professional midwifery be implemented in all health systems.<sup>26-30</sup>

In the context of Guatemala, the addition of this cadre of health professionals to the health system could serve multiple purposes, addressing both maternal mortality and health systems shortages, while simultaneously building a connection between traditional and formal health care systems. Figure 1 demonstrates how all three cadres of health workers – the TBAs, health facility workers and professional midwives – could work together for the health of the pregnant, delivering and post-partum woman.



**Figure 1. Model for Health Worker Collaboration**

Given that this is the first time that a government-supported professional midwifery program has been introduced in Guatemala since 1960, research to inform this program’s implementation is critical. This dissertation – through three papers – will consider the past, present, and future of maternal health services in Guatemala in order to inform the implementation of midwifery in Guatemala (See Figure 2). This dissertation assesses forces that influenced the creation of maternal health policies in the country historically, explores current perspectives from today’s maternal health providers toward midwifery, and evaluates midwifery’s capacity for sustainability presenting recommendations for the future.

To explore the past, the first paper – Chapter 2 – is a chronological policy review based on Meier’s Linear Model of the Public Policy Process. The aim of this paper is to consider how international and society-centered forces influenced the creation of policies in Guatemala regarding birth attendance since the signing of the Peace Accords in 1996. This chapter demonstrates that the goal of international forces – the promotion of SBA – differed from the grassroots, societal forces – the promotion of intercultural care and inclusion of the TBA. These opposing priorities may have hindered progress in reducing maternal mortality disparities between indigenous and non-indigenous women. These forces need to be considered in light of the reintroduction of professional midwives to the health system, since this new health worker has the potential to address the agendas of both international and societal forces.

The second paper – Chapter 3 – delineates the present-day National Vision established by key policy makers for professional midwifery in Guatemala. Given the importance of understanding whether maternal health providers share this vision, this chapter elucidates misperceptions, attitudes and expectations about the addition of midwifery to the healthcare system by Guatemalan physicians, nurses, midwives and TBAs as compared to the National Vision. By comparing commonalities and discrepancies in their views, this chapter identifies potential threats and facilitators to this strategy’s success in Guatemala.

The third paper – Chapter 4 – looks to the future, and is based on Schell’s Sustainability Framework. The aim of this chapter is to assess the current midwifery strategy’s capacity for sustainability and to present recommendations based on identified impediments to sustainability.

Together, these papers provide findings that can improve the design, implementation, monitoring and evaluation of the professional midwifery strategy in Guatemala, and can inform program and policy decisions to implement this strategy in Guatemala, Latin America and beyond.

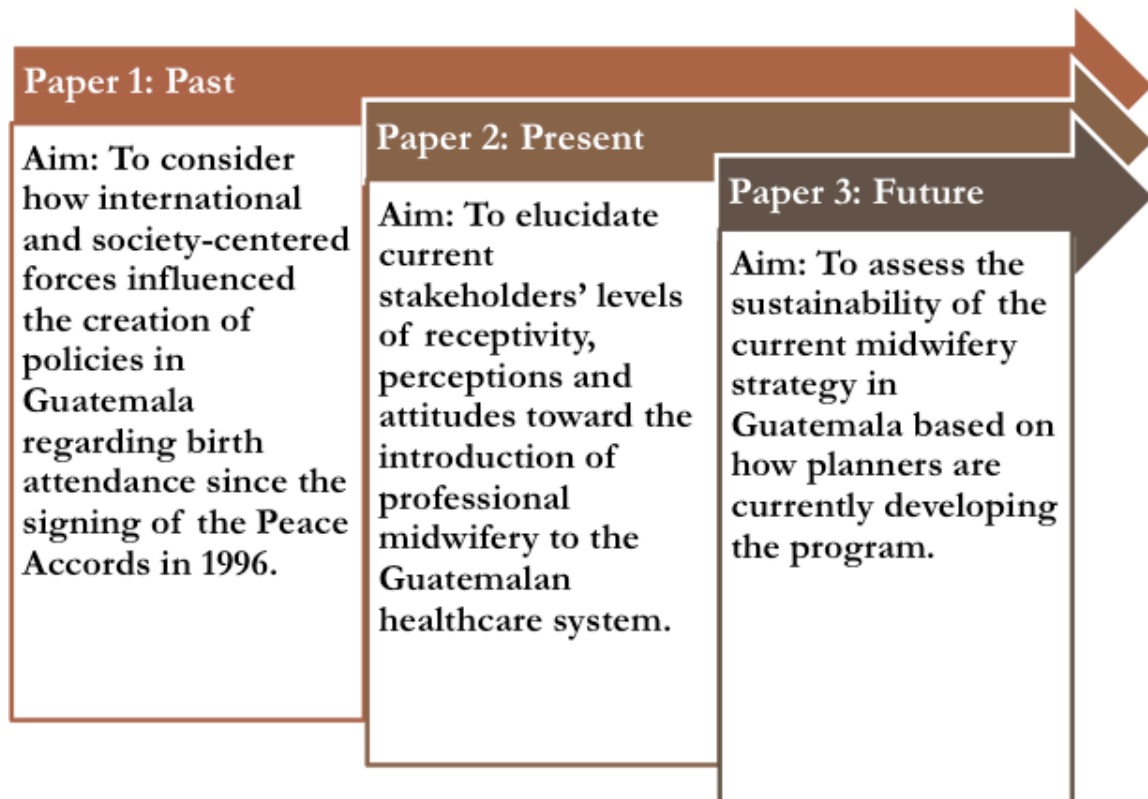


Figure 2. The Three Aims of this Dissertation

## Chapter 2.

# The Past: A Review of the Forces Influencing Maternal Health Policies in Post-War Guatemala

### Abstract

**Background.** The 1996 signing of the Peace Accords ended Guatemala's 36-year civil war and explicitly prioritized addressing the high rates of maternal mortality in the country. Despite the creation of post-war policies to improve maternal health, Guatemala continually ranks among the countries with the highest maternal mortality ratios (MMR) in Latin America, especially among the Mayan population. Meier's Linear Model of the Public Policy Process describes policy makers as experiencing different forces when making policy decisions. A particular type of skilled birth attendant (SBA) – the professional midwife- is being reintroduced for the first time since 1960 to Guatemala's health system. In light of this new policy, this paper asks the question: How have international and society-centered forces influenced the creation of policies in Guatemala regarding birth attendance since the signing of the Peace Accords in 1996 up to today's reintroduction of midwifery?

**Methods.** To understand both the international and society-centered forces influencing policy makers, we used a process tracing approach - a qualitative case study process that draws from multiple sources of information - to trace the creation of maternal health policies in post-war Guatemala. We analyzed the content of 162 documents (policy documents, peer-reviewed journal articles, and gray literature), noting international and national recommendations for birth attendance along a timeline from 1996 to present, paying special attention to maternal health legislation passed in Guatemala during this time.

**Results.** In Guatemala, international forces have advocated for skilled birth attendance (SBA) to address maternal mortality. Yet, society-centered forces call for intercultural care, defending the role of traditional birth attendants (TBAs). Both forces have influenced policy makers in the creation of maternal health policies in post-war Guatemala, specifically with regard to birth attendance, and have conflicted in their agendas regarding TBAs. These tensions could impede the development of strategies to address maternal mortality in indigenous Mayan communities. The reintroduction of professional midwifery to the health system represents a means of addressing both agendas through increasing SBA and improving intercultural care for Mayan women in Guatemala.

**Conclusions.** Policy makers must constantly reconcile tensions between society-centered realities and international agendas when making policies, which can lead to challenges in achieving advances in health. Now is the time for policy makers to carefully consider the specific role that the professional midwife will play in order to both increase SBA and improve intercultural care for Mayan women in Guatemala.

## Introduction

Guatemala continually ranks among the countries with the highest maternal mortality in Latin America and has been slow to improve in this area.<sup>31</sup> This lack of progress is attributed in part to the protracted 36-year civil war that ended with the Peace Accords in 1996. The war weakened national infrastructure and resulted in the deaths or disappearances of over 200,000 Guatemalans, the majority of whom were indigenous Mayans.<sup>17</sup>

The signing of the Peace Accords was a pivotal moment in Guatemalan history, shedding light on the numerous human rights abuses and health disparities - including the high maternal mortality - among indigenous Mayan populations, which make up approximately 38% of the population.<sup>12</sup> In response, the Accords themselves explicitly included a national goal to reduce maternal deaths by 50% by the year 2000.<sup>32</sup> This goal, however, was not met. Government data estimates estimated that, at the most, maternal mortality decreased by 30% between 1989 and 2000.<sup>21</sup>

Given the unreliable nature of the data, a collaboration of international organizations, including UNFPA, USAID, and UNICEF, together with the Guatemalan Ministry of Health (MOH) conducted a maternal mortality baseline study in 2000. This survey found a national maternal mortality ratio (MMR) of 153 deaths per 100,000 live births that was adjusted to an MMR of 290 when factoring in unreported deaths.<sup>33</sup> Disparities among different populations within Guatemala were startling. While the MMR was 70 among non-indigenous Ladina women, it was 211 among indigenous women, not accounting for underreporting.<sup>33</sup> In 2007, the national MMR was 140, and the MMR among indigenous women was still twice that of non-indigenous women (163 versus 77). Over 70% of maternal deaths in Guatemala were still occurring among indigenous women.<sup>13</sup> Given that maternal mortality was named a national priority in 1996 leading to subsequent legislation to improve maternal health, why has it remained unacceptably high among Mayan women?

In post-war Guatemala, policy makers at the national level in Congress and within the Ministry of Health (MOH) have created maternal health policies in an effort to achieve the Accords' national commitment to reduce maternal deaths. This chapter asks the following question: What influenced the creation of maternal health policies since the signing of the Peace Accords in Guatemala in 1996?

A body of literature explains the process itself of creating public policy using different models.<sup>35-38</sup> One such model - Meier's Linear Model of the Public Policy Process - suggests that policy makers themselves experience pressure in the form of forces during the process of forming policy. Borrowing from Meier, we suggest that policy makers at the national level in Guatemala are influenced by both "society-centered forces" in the form of grassroots movements and "international-centered forces" from international agencies such as USAID, UNFPA, and WHO when making maternal health policy choices.<sup>36</sup>

At the time of the Peace Accords, international agencies - the "international forces" for the purpose of our study - were promoting increased access to basic emergency and comprehensive obstetric care, including skilled birth attendants (SBAs) as a critical strategy to improve maternal health. SBA is defined as a midwife, physician, nurse or other health

care professional that provides care during pregnancy, childbirth, and the postpartum period and is trained to attend normal deliveries and diagnose and refer complications.<sup>6</sup> Yet, as of 2007, SBA attended only 51% of births in Guatemala, with that rate significantly lower among indigenous women.<sup>20</sup>

Prior to 1996 the Guatemalan government was highly authoritarian representing the interests of the elite and highly exclusionary of the interests of the indigenous people.<sup>15</sup> The end of the civil war marked the beginning of a new era, laying the groundwork for social movements representative of groups that had formerly been repressed, or "society-based forces" for the purpose of our study. The Peace Accords galvanized a grassroots social movement for indigenous rights with one such right being intercultural care. Representatives of indigenous peoples and women's groups demanded culturally appropriate care and respect for indigenous medicine, including recognition and integration of the traditional birth attendant (TBA) into the health system.<sup>34</sup> TBAs are informally trained community members who are the birth attendant of choice among Mayan women.<sup>14</sup> Today, approximately 70% of births in rural indigenous Guatemala still take place outside the formal health care sector with the assistance of TBAs.<sup>14</sup>

Applying Meir's model we postulate that international policies strongly influence state interests to adopt certain policies in line with global objectives through norm setting, technical assistance, funding and political ties.<sup>36</sup> Specifically in Guatemala, policy makers at the national level have aligned with international forces to advocate for the adoption of skilled birth attendance. In Guatemala, the SBA strategy was countered by society-centered forces represented by the grassroots movement for intercultural care, which has consistently defended the role of TBAs in improving indigenous maternal health. Scant attention has been paid to these conflicting forces influencing policy-makers' choices and resulting tensions that may have impeded the implementation of successful strategies to reduce maternal mortality in indigenous communities in post-war Guatemala.

This analysis is timely because a significant policy shift is taking place in Guatemala whereby the government is reintroducing a particular type of SBA – the professional midwife - as part of the national health system, for the first time since 1960.<sup>39</sup> This policy, like those preceding it, is also a response to both societal and international forces. We consider the reintroduction of midwifery in light of both agendas.

## Methods

To understand both the international and society-centered forces influencing national government policy makers, we explored the rise of the two influential forces using a process tracing approach, a qualitative case study process commonly used in political science.<sup>40</sup> This approach draws from multiple sources of information to curtail bias. A key component of process tracing is its capacity to trace political and social phenomena over the course of time in light of a specific research question to establish common patterns and evaluate possible causal linkages.<sup>40-42</sup>

<b>Documents Describing International Forces</b>	
International event policy documents and brochures (English and Spanish)	30
Peer-reviewed journal articles (English)	38
<b>Documents Describing Society-Centered Forces</b>	
Guatemalan policy documents (Spanish)	41
Guatemalan peer-reviewed journal articles (Spanish)	8
Other reports/gray literature (English and Spanish)	9
Guatemalan survey documents (English and Spanish)	6
<b>Total</b>	<b>132</b>

**Table 1. Analyzed Documents by Type**

This approach has been applied with increasing frequency to public health questions.<sup>43</sup> For example, Shiffman and colleagues used the approach to analyze political priority of maternal health in Guatemala, Honduras, India, Indonesia and Nigeria.<sup>44-47</sup> Process tracing allowed us to evaluate the international and society-centered forces influencing Guatemalan national policy makers and to sequentially explore the creation of national policies in response to these forces from 1996 to today's discussion about professional midwifery.

First, to examine the international forces we analyzed English and Spanish policy documents and brochures from foundational international policy-making events as well as peer-reviewed articles about these events and their effect on Guatemalan policy, beginning with the launch of the Safe Motherhood Initiative in 1987 through to 1996 (pre Peace Accords) and from 1996 until today (post Peace Accords). These documents were identified by a web search using PubMed and Google Scholar using the following search terms (and their Spanish equivalents): maternal mortality, skilled birth attendance, intercultural care, traditional birth attendant, safe motherhood, and Guatemala. We identified 68 documents (See Table 1).

Next, to examine the society-centered forces, we located key informants from the Ministry of Health and the University of San Carlos in Guatemala City with expertise in maternal health policies in Guatemala. These informants guided us to in-country policy documents, Guatemalan peer-reviewed journal articles, international and national reports, Guatemalan survey documents and internal gray literature on intercultural care from 1996 to present containing the same search terms. This search yielded 64 documents.

Using the process tracing approach, we analyzed the content of all 162 documents, noting international and national recommendations for birth attendance along a timeline from 1996 to present, paying special attention to maternal health legislation passed in Guatemala during this time.<sup>40</sup>

## Results

The results below demonstrate how international and society-centered forces that influenced national government policy makers in the creation of maternal health policies were often misaligned, specifically with regard to TBAs. These tensions may have ultimately affected successful implementation of maternal health strategies. First, we provide background, explaining the development of the international movement for SBA beginning with the Safe Motherhood Initiative in 1987 leading up to the Peace Accords of 1996. Next, we describe how the civil war established the circumstances that led to a society-centered push for a role for intercultural health care in Guatemala in the years preceding the Peace Accords. We then trace specific Guatemalan maternal health policies from 1996 to present, demonstrating that these policies were developed at the national level in response to both conflicting international and society-centered forces during the post-war period.

### Background: 1987 - 1996

#### International Forces: The Global Movement towards Skilled Birth Attendance

In 1987, while Guatemala was in the throes of a civil war, the international Safe Motherhood Initiative Conference took place. This milestone event, sponsored by the World Bank, UNFPA, WHO, the International Planned Parenthood Federation, and the Population Council tackled the problem of global maternal mortality and committed to reducing maternal deaths by 50% by the year 2000. The Safe Motherhood Inter-Agency Group (IAG) was formed out of this conference and was influential in designing global policies that supported training TBAs as a priority strategy.<sup>48</sup> Consequently, countries around the world began training TBAs and at times providing them with “clean delivery kits.”<sup>1</sup>

In the next decade, this international stance was reversed. It began in 1990, with a WHO maternal mortality study which alarmed the international community by estimating that 585,000 women were dying annually around the world from pregnancy related causes,<sup>49</sup> 80,000 deaths higher than experts had expected.<sup>1</sup> The study concluded that the lack of “scientific knowledge” and poor literacy of TBAs led to ineffective TBA programs and continued high maternal mortality.<sup>50</sup>

In a landmark motion in 1992, WHO, UNFPA and UNICEF informed by this study released a joint statement about TBAs, stating that “the use of traditional birth attendants is regarded as an interim solution in pursuit of the greater goal of giving all women and children access to acceptable, professional, modern health care.”<sup>10</sup> Little weight was given to measurement challenges inherent in maternal mortality studies and the absence of a baseline against which the global MMR was measured in the first place. Also, other factors contributing to maternal deaths such as poverty, gender dynamics in the community and within the health facility, quality of obstetric care at facilities and access issues, were hardly addressed. Instead, it was decided that TBAs were ineffective. As such, programs and funds worldwide were shifted away from them and towards skilled birth attendants.<sup>1</sup>



In 1994, representatives from 179 countries gathered at the International Conference on Population and Development (ICPD) in Cairo, Egypt. The purpose of this conference was to collectively set goals to achieve advances in women's health, life expectancy, empowerment and education. They established the goal of reducing global maternal mortality by one half of the 1990 levels by 2000 and further reducing that number by half by 2015.<sup>51</sup> Interestingly, the language pertaining to TBAs had not shifted to excluding them entirely: "All births should be assisted by trained persons, preferably nurses and midwives, but at least by trained traditional birth attendants."<sup>51</sup>

While all these global recommendations for SBA were being developed from 1987 to 1996, fewer than 40% of Guatemalan women were giving birth with SBA. TBAs were still the preferred attendant, and no official government programs promoting SBA were in place in Guatemala.<sup>21</sup>

### **Society-Centered Forces: The Civil War and the Role of TBAs**

Mayan women trust and have access to TBAs in their own communities, who provide them with culturally appropriate obstetric services, such as allowing for vertical delivery positions, conducting ritualistic burials of the placenta, providing herbal teas during labor and delivery, and the use of a *temescal*, or a traditional sauna, following birth.<sup>52</sup> It is believed that Mayan TBAs were born with the destiny to carry out this role in their community, and as such, they maintain the centuries-old traditions in caring for pregnant, delivering and post-partum women. The role of the TBA often extends beyond assisting in childbirth; hers is a highly valued spiritual role as well in Mayan communities.<sup>15</sup>

When the Safe Motherhood Initiative was launched, Guatemala was steeped in a bloody civil war between insurgent Guatemalans and the United States backed Guatemalan military. Indigenous populations who had long suffered from unequal land tenure formed rebel groups that rose up against the military dictatorship regimes.<sup>53</sup> During the war, the government monitored traditional healers – including TBAs – threatening and often killing those they suspected of supporting the guerilla cause by providing them health care and medicines. The government used the traditional healers' alleged links to the guerillas as justification for the murder of these practitioners.<sup>19</sup> This led to further distrust on the part of the Mayan people toward the government and the military, contributing to a disconnect between the traditional and the formal health systems that continues today.<sup>12,16,19</sup>

By the end of the war, over 200,000 Guatemalans had died or disappeared, the vast majority of whom were indigenous Mayans.<sup>17</sup> Throughout this conflict Mayan communities experienced rape, torture, and countless other human rights violations.<sup>18</sup> Furthermore, the civil war itself prevented the development of the needed infrastructure to increase and improve access to maternal health services in rural areas prior to 1996.<sup>46</sup>

The signing of the Peace Accords on December 29, 1996 ended the internal armed conflict. Encompassed in the Accords was a section on socio-economic agreements, including the health sector.<sup>54</sup> Maternal mortality was identified as a priority because it was one of the highest in Latin America and would serve as an indicator to measure how well the health

system was functioning overall in providing quality services to Guatemala’s citizens.<sup>32</sup> The Accords set the goal of reducing maternal mortality by 50% between 1995 and 2000.<sup>21</sup> This target mirrored the language used in the ICDP conference only two years prior, even though this goal may not have been realistic for Guatemala at the time, given the extensive damage exacted on the health infrastructure during the war and the short time frame to accomplish the goal.<sup>32</sup> The Guatemalan MOH was charged with the responsibility for reducing maternal mortality, through creating an integrated health system guaranteeing quality care to its citizens.<sup>32</sup> The inclusion of maternal health in the Peace Accords in 1996 began an era of politicizing maternal health.<sup>21</sup>

## Post-war Policies: 1996 to Present

Both the international forces (promoting SBA) and the society-centered forces (promoting intercultural care inclusive of the TBA) were at play in the years leading up to the signing of the Peace Accords in 1996. We will now present how national policy makers in Guatemala responded to these forces following the civil war in their effort to realize the Peace Accords’ goal to reduce maternal mortality. We describe these policies specifically in terms of their recommendations for birth attendance. Figure 1 outlines key pieces of international legislation in tandem with policies adopted in Guatemala, demonstrating that policy makers passed conflicting policies, with some promoting SBA and others inclusive of TBAs.

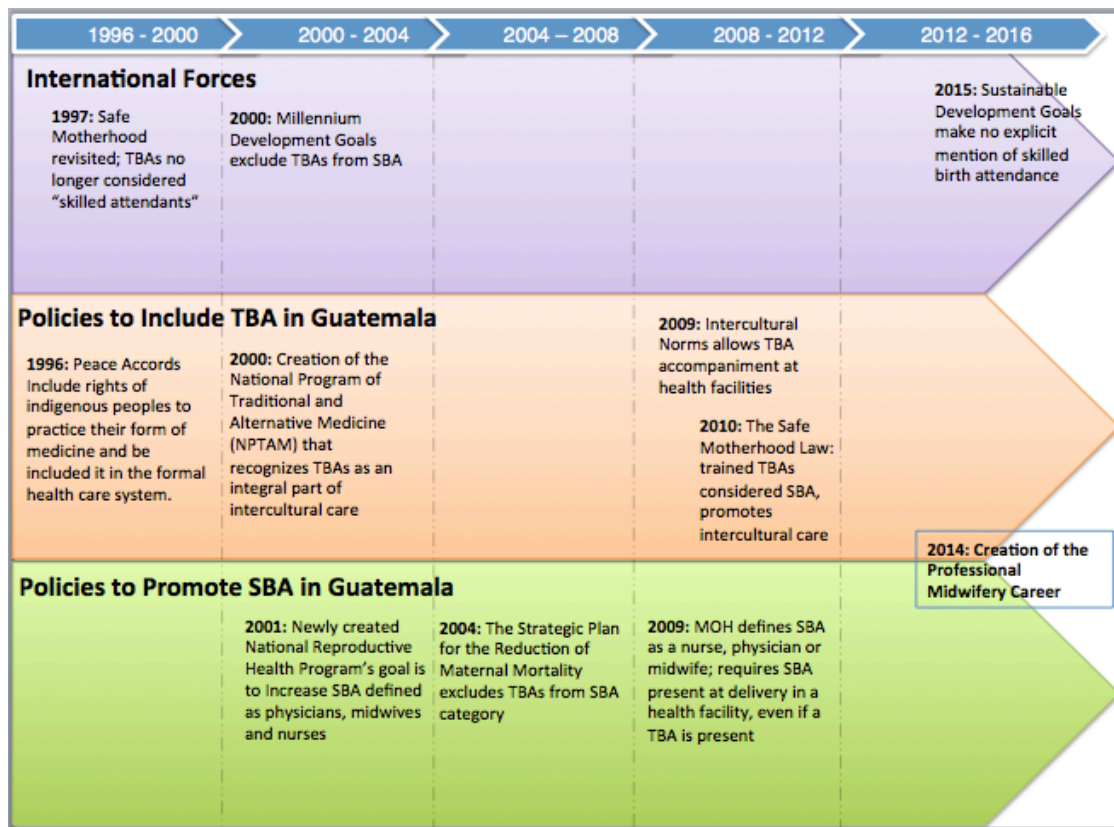


Figure 1. International policies towards SBA and Guatemalan national policies that promote SBA or include TBA from 1996 to 2016

## National Guatemalan Policy Makers' Response to International Forces

International policies on birth attendance influenced maternal health policies in post-war Guatemala. In 1997, a global Safe Motherhood Technical Consultation meeting was held to review successes and failures in the first decade following the launch of the Safe Motherhood Initiative. Ten “key action messages” resulted from this meeting, with the sixth message reading, “ensure skilled attendance at every delivery.”<sup>55</sup> Although these were not evidence based recommendations, it was believed that this action was the one that would have the highest potential impact on maternal mortality.<sup>56</sup> This meeting defined skilled attendants as “people with midwifery skills (for example physicians, midwives, nurses).”<sup>55</sup> TBAs were officially no longer considered skilled per this definition. It was believed they lacked the capacity to address obstetric complications, due to their lack of access to emergency transport systems, the absence of supervision, their inability to identify and treat obstetric emergencies, and their limited integration into formal health care systems.<sup>1,5</sup>

In 1997, while the international agencies were defining key action messages to address maternal mortality excluding TBAs, a coalition of Guatemalan policy makers in Congress were creating the National Plan for the Reduction of Maternal and Perinatal Mortality - or The Plan - to operationalize the Peace Accords' goal of reducing maternal mortality by 50% by the year 2000. While, the Peace Accords themselves were written democratically with representation from indigenous groups, women's groups, academics and government officials, and others, the Plan itself was formulated by a small group of government officials at the national level. The Plan called on support from various players such as universities, churches, non-profits, community organizations and international agencies to accomplish these goals, but there was no mention of the role of TBAs.<sup>57</sup>

The conspicuous exclusion of TBAs from the Plan suggests that the international forces promoting SBA influenced Guatemalan policy makers during the Plan's formation. As a result, the very strategy to operationalize the demands of the Peace Accords to address human rights violations against the Mayan people and to reduce maternal mortality effectively excluded TBAs, the preferred birth attendants for Mayan women.<sup>57</sup>

In 2000, the United Nations established the Millennium Development Goals (MDG), and Guatemala was a signatory country. The MDGs were targets to strive for in order to meet the needs of the world's poor, with the fifth MDG aiming “to improve maternal health by reducing the MMR by three quarters and achieving universal access to reproductive health by the year 2015.”<sup>2</sup> The MDG explicitly called for “skilled health personnel” defined as physicians, nurses or midwives who work within “an enabling environment or health system capable of delivering appropriate emergency obstetric care for all women who develop complications during childbirth.” The call for an “enabling environment” was an important one, in that it formally recognized the need for the essential infrastructure and resources for SBA. The MDG also excluded TBAs from being considered a “skilled birth attendant” by international agencies.<sup>2</sup>

In 2001, in response to the Cairo Conference a full seven years earlier, Guatemala's Congress passed the Social Development and Population Law, which again established maternal health as a national priority, defining reproductive health in accordance with the Cairo Conference

definition.<sup>58</sup> This law states that people have a “right to a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.”<sup>59</sup> This decree emphasized the need for SBA, including the enabling environment mentioned in the MDGs and calling for the creation of health facilities capable of responding to obstetric emergencies, especially in rural areas with high maternal mortality.<sup>60</sup>

The law led to the training of existing physicians, nurses, and auxiliary nurses to attend to pregnancies, deliveries and post-partum in a culturally appropriate way.<sup>21</sup> This language suggests that policy makers were responding to both forces in this piece of legislation by promoting SBA to be trained in cultural sensitivity and using the National Guide to Obstetric Management. However, this approach was still far from inclusive of TBAs. While TBAs were mentioned in the law, it simply stated that they would be recipients of training; they were not considered skilled attendants.<sup>58</sup> As a result of this law, 2,940 TBAs were trained in identifying and referring danger signs.<sup>60</sup>

The Social Development and Population Law and the Baseline Maternal Mortality Study in 2000 led to the establishment of the Strategic Guidelines for the Reduction of Maternal Mortality in 2003 to further operationalize plans to reduce maternal mortality. Included in the guidelines was the creation of the *Programa Nacional de Salud Reproductiva* or National Reproductive Health Program that was tasked with reducing maternal mortality, in an effort to ensure maternal mortality remained a priority with the next political regime to assume power in 2004.<sup>60</sup>

In 2003, the National Reproductive Health Program generated the Strategic Plan for the Reduction of Maternal Mortality.<sup>13</sup> This strategy promoted extending coverage of essential obstetric care, promoting SBA (exclusive of TBAs), facilitating access to quality humanized health services, and empowering women. Based on the 1992 WHO statement on TBAs, the Strategic Plan explicitly states that TBA trainings had failed in the past, and as such excludes them as qualified health workers, leaving this category to include only physicians, nurses and professional midwives although no professional midwives existed in country at the time.<sup>13,60</sup>

Historically, linguistic and cultural marginalization towards Mayan women generally and TBAs specifically by majority Ladino health workers in the formal health sector have perpetuated the divide between health systems.<sup>12</sup> We hypothesize that national policies, such as the Strategic Plan of 2003, may have further contributed to marginalization of TBAs in health facilities, as policies such as these justify exclusion of TBAs from health facilities due their omission for the category “skilled attendant.”<sup>12,73</sup>

Between 2003 and 2008, national policies promoted SBA with no mention of TBAs. In 2008 the current political regime created “The Plan of Action for Qualified Attention for Normal and Complicated Maternal and Neonatal Care for Birthing Services in Health Facilities.”<sup>60</sup> The plan carefully outlines strategies to improve training for “qualified health workers,” but it never defined the professions of those considered to be qualified health workers, be they nurses, physicians or TBAs.

Then, in 2010, another shift took place. The milestone Safe Motherhood Law was passed that expanded the definition of a qualified health provider to again include trained TBAs along with physicians, professional midwives, and all nurses, perhaps in response to society-

centered forces calling for intercultural care. The law explicitly stated that these providers have the skills and abilities to provide care during pregnancy, childbirth and postpartum. The Safe Motherhood Law represents a national effort to expand free, accessible, and equitable maternal-newborn health services to women and paved the way for the creation of the professional midwifery profession in Guatemala.<sup>61</sup>

At the international level, in 2015 the United Nations, reviewed progress made by the MDGs and established a set of 17 new targets to be achieved by 2030 called the Sustainable Development Goals (SDG). “Improving maternal health” was no longer stated as an overt goal. Instead the goals to “ensure healthy lives and promote well-being for all ages” and “achieve gender equality and empower all women and girls” encompassed women’s health. No explicit mention of skilled birth attendance was made. Under the overall target of gender equality, the SDG stated: “ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences.”<sup>62</sup> Language in the SDGs moved away from promoting SBA and addressing maternal mortality specifically to a more holistic approach to women’s health. Today, at the international level, it appears that another shift is taking place that could have further implications on Guatemalan policies.

While the MDGs were under review and the SDGs were in development, in September 2014, through the passing of *Acuerdo Ministerial 538-2013* and *480-2014*, policy makers in Guatemala laid the foundations and guaranteed funding for the career path for a new skilled attendant, the professional midwife.<sup>63,64</sup> Subsequently, in 2015, with support from UNFPA, USAID, JHPIEGO, UNICEF, and University of San Martin de Porres in Lima, Peru, the Guatemalan MOH began collaborating to open a midwifery school in Huehuetenango. This school will be the first to open in Guatemala since the Midwifery School at the University of San Carlos closed in 1960.<sup>12</sup> The financial and technical support from the very agencies driving the international agenda for SBA demonstrates that the creation of the professional midwifery career in Guatemala is in line with their interests, with the midwife qualifying as a skilled birth attendant in accordance with current global definitions.<sup>27,65-67</sup>

## **National Guatemalan Policy Makers’ Response to Society-centered Forces**

Guatemala’s complex, violent history perpetuated health and economic inequities between the indigenous Mayans and the Ladino majority, as evidenced by the disproportionately high maternal mortality ratios among Mayan women.<sup>11</sup> The Peace Accords themselves overtly included statements about the rights of indigenous peoples to practice culturally appropriate medicine within the formal health care system.<sup>54</sup> In the aftermath of the civil war, Guatemala’s intercultural care movement, with roots in global human rights and women’s movements, arose, calling for social participation and reform in the health sector, based on the principles of dialogue, respect for diversity, democracy, participatory cultural interactions, consensus and cooperative goal setting. Specifically, the movement advocates for the TBA’s rightful inclusion in the health system as a birth attendant.<sup>34</sup>

Historically, even before the signing of the Peace Accords, the Guatemalan MOH recognized the high proportion of home births, and, as a result, promoted TBA trainings as early as 1955, well before the advent of the global Safe Motherhood Initiative in 1987.<sup>12</sup> These trainings continue to be sustained by a wide array of players in Guatemala since that time, such as regional non-profit organizations, religious groups, and international volunteers. Today, the MOH issues a license to those TBAs that regularly attend training sessions at their local health post.<sup>12</sup> During these monthly six-hour meetings, the nurses at health centers train TBAs to identify risk factors, promote hygiene and recognize complications in need of referral. In exchange for attending these trainings, TBAs are allowed to legally practice in country.<sup>14</sup> There is no standardized method for evaluating the quality or impact of these trainings.<sup>12</sup>

Since 1996, great legislative strides have been taken in an effort to improve intercultural care in Guatemala's health sector. In fact, TBAs have never explicitly been prohibited to practice in post-war Guatemala.<sup>34,54,68</sup> In 2000 - the same year as the establishment of the MDGs - the National Program of Traditional and Alternative Medicine (NPTAM) was founded to create and promote policies, norms, and strategies in Guatemala to validate, recognize, and respect traditional medicine's knowledge, resources, methods, and practices as well as to develop a more focused approach to intercultural care, through integration of such norms as vertical delivery, traditional medicines, educating and raising awareness among health facility staff and creating more culturally appropriate health facilities. This program has never been formally evaluated for impact and is chronically underfunded.

In 2005, the Public Agenda towards Indigenous Peoples was created by the NPTAM to help the MOH develop policies informed by the following principles: 1.) Cultural pluralism through equality of rights, responsibilities and opportunities; 2.) The right for there to be differences among diverse groups of people; and 3.) The possibilities for there to be unity in diversity when projects respect the identity of different people groups. *Acuerdo Ministerial No. 1632-2009* was passed in 2009 that formally created the Unit of Indigenous Populations' Health Care and Interculturality, or "The Unit."<sup>54</sup>

The Unit declared that the worldview of indigenous peoples should inform the implementation of health services, adapting to them and respecting their way of life. It also allowed for the NPTAM to operationalize an array of intercultural norms in health facilities including: choice of birth position, women's consumption drinks of their choosing during labor other than alcohol, walking during labor, and accompaniment by a family member or TBA at the health facilities, albeit with supervision by a skilled attendant defined as a nurse, physician, or professional midwife.

The landmark Safe Motherhood Law in 2010 responded to society-centered forces by promoting free, accessible, and equitable maternal-newborn health services respectful of intercultural care. This significant legislation included trained TBAs again as a qualified health provider, despite the international agencies' definition to the contrary. Specifically, it states that TBAs can provide intercultural care to improve maternal-newborn care in health facilities 24 hours a day. As such, they are allowed to attend births at health facilities and receive trainings there. However, as mentioned above, many TBAs today still face resistance to this type of integration by health providers in facilities.<sup>12</sup> Furthermore, the Safe Motherhood Law calls for TBAs, in coordination with their representative organizations, to

define for themselves their role within health facilities and establish a program to transition trained and certified TBAs to a higher more technical level.<sup>61</sup> The MOH Strategic Plan for 2010 to 2015 included cultural relevance, indigenous medicine, respect and dignity as key components of the plan.<sup>64</sup>

The Safe Motherhood Law paved the way for the creation of the professional midwife career. Applicants to the new midwifery school - that is currently in the process of opening - are required to be indigenous Mayan women from rural Huehuetenango above 18 years of age with the equivalent of a high school diploma. It is also recommended that applicants be TBAs themselves or have relatives who are TBAs to ensure their familiarity with intercultural care. Graduates are expected to offer their services in their place of origin for at least three years following graduation to improve intercultural care and relations with TBA<sup>64</sup>

As demonstrated in Figure 2, while there have been some improvement in maternal health since the launch of the Safe Motherhood Initiative in 1987, overall the MMR for Guatemala is improving too slowly, most notably among Mayan women. It should be noted that Figure 2 also does not include unreported maternal deaths prior to 2007.<sup>13</sup> Additionally, the national SBA has only slightly increased since the launch of the Safe Motherhood Initiative. Why has the creation of these policies not resulted in more rapid improvements in maternal health in Guatemala, particularly among indigenous women?

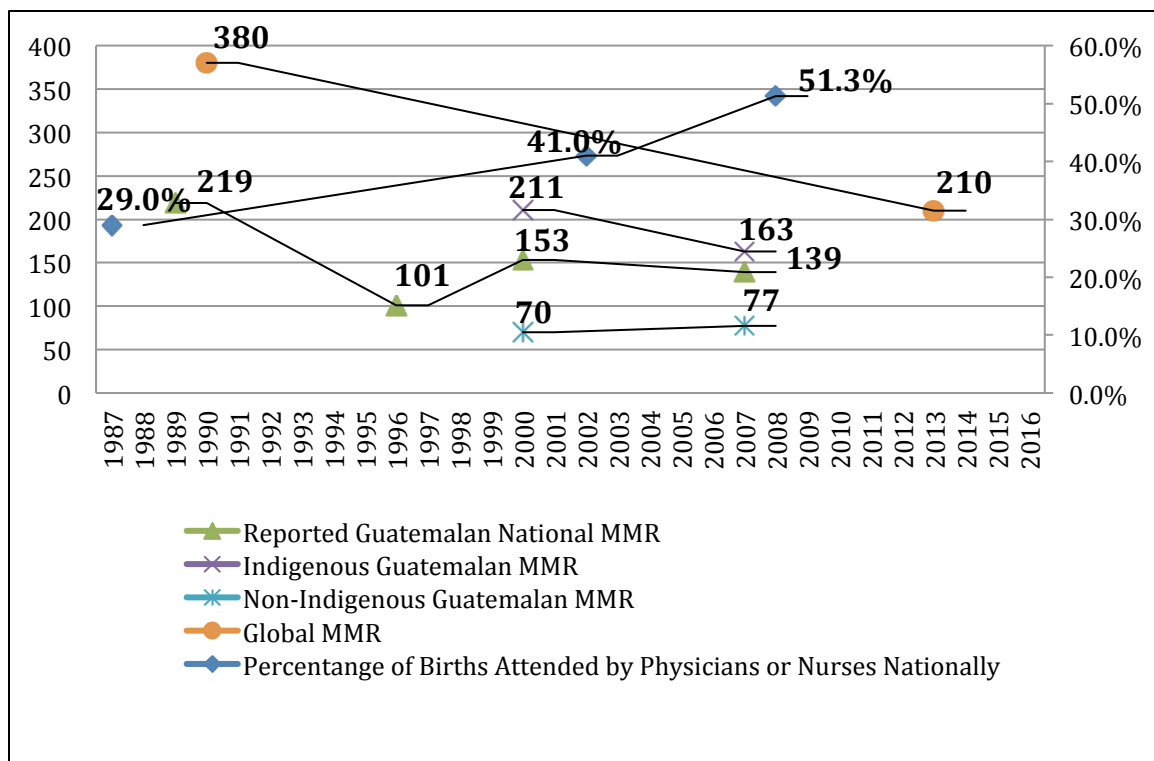


Figure 2. MMR and SBA in Guatemala from 1987 to 2016<sup>13</sup>

## Discussion

It is important to note that, despite the development of the maternal health policies described, the Guatemalan MOH reports that there are inadequate health services to provide SBA throughout the country, due to human resources shortages and inadequate distribution and poor management of financial resources.<sup>19</sup> In fact, in 2012, the Guatemalan Ministry of Public Health and Social Welfare's budget was only 1.08% of the Gross Domestic Product (GDP), well below the WHO recommended 5%.<sup>71</sup> A global survey in 2012 cited financing and high staff turnover ratios in the MOH as key bottlenecks to progress in maternal health in Guatemala.<sup>72</sup> Therefore, despite the existence of policies to increase SBA including creating an enabling environment, the Guatemala faces many challenges in the actualization of these policies.

This review of national and international policies revealed two unique and conflicting agendas that influence Guatemalan policy makers at the national level— the international promotion of SBA since 1987 and the society-centered promotion of intercultural care since 1996. Between 1996 and 2016, under the leadership of five different political parties, maternal health legislation and programs have been developed to respond to both forces, with some more in line with the international agenda and others more congruent with the intercultural care movement, with deep respect for cultural diversity and the important role of the TBA.

The civil war and resulting Peace Accords established the society-centered forces that called for a legitimized, lasting role for intercultural health care in Guatemala, which includes the recognition and support of TBAs. Guatemala was unique in that, unlike other countries at this time, the civil war created the circumstances that allowed for push back in defense of TBAs and indigenous medicine through the creation of the intercultural care movement. Despite the vacillating policies regarding TBAs and the resistance they continue to experience in health facilities described above, TBAs have maintained their important role in Mayan communities.<sup>14</sup>

In 1997, shortly after the signing of the Peace Accords, international forces began strongly recommending SBA, defined as physicians, nurses and midwives, shifting the focus away from TBA trainings on the grounds that these trainings failed to address maternal mortality. These changing attitudes towards TBAs led to strain between formal health care sectors and TBAs around the globe, including in Guatemala.<sup>50,69</sup> This global push for SBA came at a crucial time when Guatemala was just emerging from a 36-year civil war and the intercultural care movement was gaining traction. Indigenous communities were already distrustful of the formal health sector following the war, further motivating Mayan women to stay home to give birth with the assistance of a TBA.<sup>12,16</sup> The international recommendation for SBA was, therefore, incongruent with the contextual realities and needs of Guatemala's Mayan population at the time.

The TBA is the force in the middle which is supported by the Guatemalan need to acknowledge indigenous rights and support intercultural care, but weakened by international maternal health efforts that have worked to decrease and undermine the role of the TBA in



the birth process by promoting SBA. Conflicting agendas regarding the role of the TBA have contributed to a lack of progress in improving maternal health among Mayan women.

As Figure 1 demonstrates, since 1996 policies have vacillated between those more inclusive of TBAs to policies promoting SBA and excluding TBAs. For example, in 2000 the MDGs solidified the exclusion of TBAs from the category of SBA, and Guatemala was a signatory country. Yet in that same year Guatemala also formed the National Program of Traditional and Alternative Medicine, to promote intercultural care. As of 2001, TBAs were included in trainings, but it is not clear if they were still considered skilled. The Strategic Plan for the Reduction of Maternal Mortality in 2004 clearly excluded TBAs, but the 2010 Safe Motherhood Law included them again as qualified health providers, provided they were licensed and trained by the MOH. Throughout this time of conflicting policies towards TBAs, TBAs demonstrated resilience and tenacity.

Today, although tens of thousands of TBAs are registered by the Guatemalan MOH, many only interact with health facilities due to manipulative practices.<sup>1</sup> For example, in 2012 the MOH informed TBAs that they needed to attend health facility trainings in order to be registered and to receive the forms needed to apply for birth certificates for the newborns in their care. These types of arrangements have been ongoing since the signing of the Peace Accords.<sup>16,70</sup> The scope of the TBA's work continues to be restricted as health facility deliveries are promoted throughout the country.

A recent study demonstrated that while most facilities in Guatemala are undertaking some sort of intercultural adaptation, such as allowing for TBAs to enter facilities, the use of traditional teas or allowing for the choice of birth position, they are not standardized or consistent. TBAs continue to report that health facility providers exclude them and treat them poorly. Health facility providers themselves expressed feeling resistant toward providing intercultural care and permitting TBAs to work in facilities.<sup>34</sup> Regardless of key policy makers' classification of TBAs as skilled or unskilled, the exclusion of TBAs from health facilities and the low uptake of intercultural care, women continue to seek out their services.<sup>12</sup>

The landmark Safe Motherhood Law in 2010 was the first example of a single policy aiming to appease both international and society-centered agendas by expanding the definition of skilled provider to again include the TBA. Today, with the reintroduction of the professional midwife, Guatemala has another opportunity to accommodate the interests of both agendas.

International forces appear to be strongly in favor of the creation of the professional midwife career in Guatemala given the financial and political support USAID, UNFPA and the WHO are providing to train this cadre of health worker. A recent series in *The Lancet* described the global contribution professional midwifery has made to improvements in maternal and child health outcomes, specifically through reduced maternal and neonatal mortality and morbidity, preterm births and stillbirths, decreased numbers of unnecessary interventions, and overall improvements in reported psychosocial and public health outcomes. In addition to these benefits, professional midwifery can lead to a more efficient use of resources provided the midwives are trained, licensed and regulated. For these reasons, and others, the series recommends professional midwifery be implemented in all health systems.<sup>26-30</sup>

Given that the professional midwife graduates from the new midwifery school will be indigenous women from rural areas with ties to TBAs, it follows that they could provide culturally appropriate birthing practices and collaborate with TBAs should this be incorporated into their training. Today is a historic moment in Guatemala in that the professional midwife presents a unique opportunity for Guatemala to provide both intercultural care and skilled birth attendance to the indigenous women.

## Limitations

This paper is limited to analyzing only the policy choice stage within Meier's model, not any of the stages beyond that point, such as implementation and outcomes. The analysis of the influences on the policy makers alone is insufficient to extrapolate the effects these policy choices have on impacting maternal health outcomes. This paper is the first step in a multi-step process analyzing the public policy process in Guatemala regarding maternal health policies. Further research is needed on the extent to which these policies discussed here are being implemented in a poorly financed health system and the impact these policies have had on maternal health in Guatemala.

## Conclusion

Despite significant legislation specifically aimed at improving maternal health since the signing of the Peace Accords in 1996, improvements in indigenous women's health in Guatemala have been slow. Informed by Meier's Linear Model of the Public Policy Process we demonstrate that conflicting forces - in the form of society-centered forces and international forces - regarding birth attendance have influenced policy makers in their creation of maternal health policies. The friction between these different forces may have resulted in inadequate strategies to meet the needs of rural, indigenous women in Guatemala. The story in Guatemala demonstrates that policy makers must constantly reconcile tensions between society-centered realities and international agendas when making policies, which can lead to challenges in achieving advances in health.

If maternal deaths are going to decrease at a higher rate among rural indigenous women, it is necessary to increase SBA. Yet, this recommendation overshadows traditional perspectives and cultural practices in post-war Guatemala, namely the central role TBAs play in the provision of intercultural care for Mayan women. International recommendations for SBA have marginalized TBAs and prevented indigenous women from accessing life-saving emergency obstetric services.<sup>34</sup> Yet, Guatemala is unique in that TBAs have resisted this marginalization and maintained a key role in the delivery of maternal health services in indigenous Guatemala. The re-introduction of professional midwifery demonstrates a unique convergence of both society-centered and international agendas in one policy. Provided the care the professional midwife delivers is truly intercultural and collaborative with TBAs, midwifery creates a distinctive opportunity to improve the maternal health of indigenous women. Now is the time for national policy makers to carefully consider the specific role the professional midwife will play in order to accommodate both agendas, increasing skilled birth attendance and improving intercultural care for Mayan women in Guatemala.

## Chapter 3.

# The Present: Elucidating Current Stakeholders' Attitudes, Perceptions and Expectations toward Professional Midwifery

## Abstract

**Background.** Despite Ministry of Health (MOH) recommendations that all women give birth with a skilled birth attendant (SBA), 70% of births in Guatemala take place outside health facilities with traditional birth attendants (TBAs), who are not formally trained. To increase SBA in rural, indigenous communities, the MOH is in the process of opening the first professional midwifery school since 1960. This paper aims to identify possible threats and facilitators to this strategy's success in Guatemala by assessing attitudes, misperceptions and expectations for the introduction of midwifery to the healthcare system among diverse cadres of stakeholders.

**Methods.** Qualitative, in-depth interviews were conducted with physicians, nurses, and traditional birth attendants (TBAs) in six health centers and with key decision makers and midwives in Guatemala City (n=32). We conducted open and axial coding and thematic analysis in Atlas.ti informed by grounded theory. We performed normative comparisons of participants' attitudes, misperceptions, and expectations for midwifery with the National Vision established by key decision makers and relative comparisons of these themes within and across disciplinary subgroups of participants in order to elucidate facilitators and threats to the success of midwifery.

**Results.** Physicians, nurses and TBAs were unable to define professional midwifery or describe it as a distinct profession. There was both an acceptance and anticipated resistance toward professional midwifery by all subgroups. Most stakeholders were aligned in terms of expectations for the midwife in the health facility, the need for her to coordinate with TBAs, and with intercultural care. However, there were notable differences in expectations toward supervision of and by the midwife, the specific roles of the midwife in the community, and the nature of the midwife's relationship with TBAs.

**Conclusions.** Facilitators to the success of midwifery include overall general acceptance of the midwife as a legitimate professional actor, political will at the national level, uniformity of vision across the stakeholders, and the potential for improved intercultural care and cooperative relations with TBAs. The greatest threat identified is an ambiguous road map that fails to specify how midwifery will be integrated into the health system, be incorporated into the community and coordinate care with TBAs. Such a roadmap must be addressed if this strategy is to succeed in Guatemala.

## Introduction

Maternal health outcomes in Guatemala continually rank among the poorest in Latin America and the inequities between rural, indigenous and urban, Ladina women are staggering. According to a national study, in 2007 Guatemala's maternal mortality ratio (MMR) was 140 deaths per 100,000 live births, while the MMR in rural highland regions such as Huehuetenango and Alta Verapaz was 226 and 207 respectively.<sup>13</sup> Increasing skilled birth attendance (SBA) is a priority strategy of the international Safe Motherhood agenda.<sup>8,46,74</sup> Guatemala has a severe shortage of skilled health personnel and poor management of financial resources for health.<sup>19</sup> The majority of the health workforce is concentrated in urban centers, not in rural settings where maternal mortality is highest.<sup>75</sup> It is estimated that in order for Guatemala to achieve the minimum recommended coverage of skilled attendants for the population (25 per 10,000 people), the number of health workers would have to double countrywide.<sup>21</sup> Rural indigenous women in Guatemala grossly underutilize skilled attendants mainly for reasons of access, place of residence, socioeconomic status, cultural barriers, cost, and decision-making power.<sup>76</sup>

Instead, traditional birth attendants or TBAs – who are not formally trained— attend over 50% of births in Guatemala, with this percentage even higher in indigenous communities at approximately 70%.<sup>16</sup> In general, it is the local belief that Mayan TBAs were born with the destiny to carry out this role. TBAs maintain centuries-old practices including vertical births, ritualistic burials of the placenta, the provision herbal teas during labor and delivery, and the use of a *temascal*, or a traditional sauna, following birth. Thus, the TBA maintains intercultural care practices and holds a highly valued spiritual role in many Mayan communities, as well.<sup>15</sup> TBAs often face resistance within health facilities, making integration of the two different health care models challenging.

In response to these challenges, and with support from UNFPA, USAID, JHPIEGO, UNICEF, and University of San Martin de Porres in Lima, Peru, the Guatemalan Ministry of Health (MOH) declared that it would create a new skilled birth attendant: the professional midwife or, simply, "midwife" in this paper. By design, midwifery utilizes both evidence-based biomedical techniques and traditional midwifery skills to address the full spectrum of women's needs during pregnancy, delivery, and post-partum, in both the community and health facilities.<sup>23,24</sup>

For the scope of this study, the "National Vision" for midwifery was defined through synthesizing interviews with policy makers together with a review of policy and governmental documents pertaining to the midwifery school. The National Vision will serve as a reference point against which all other perspectives are compared. According to this Vision, a midwife must be trained for three years at an accredited Guatemalan university in line with the International Confederation of Midwives (ICM) essential competencies for basic midwifery practice. A midwife differs from an obstetric nurse and plays an important role as a link both between TBAs and the health facility and between the patient and physician. Although documents were not explicit about where a midwife should work, policy makers envision the midwife working at all levels of the health system: the community, health post, health center and hospital.

Per the National Vision, applicants to the midwifery school in Huehuetenango should be indigenous women older than 18, have the equivalent of a high school diploma, originate from rural Huehuetenango, speak a Mayan language, have familiarity with culturally appropriate birthing practices, be related to a TBA, and have a sense of calling toward the profession. Graduates of the program are expected to offer their services preferably in their place of origin for at least three years.<sup>64</sup>

The midwifery school - which was in the preparatory stages of opening in Huehuetenango at the time of writing - is the first to open in Guatemala since the Midwifery School at the University of San Carlos, which operated from 1895 to 1960.<sup>12</sup> After the 1954 US-backed coup in Guatemala, work opportunities for midwives waned, as hospitals adopted a model more in line with that of the United States, relying on medical doctors to attend births. Furthermore, tensions and turf issues arose between nurses, physicians and TBAs. Physicians resisted the notion of midwives operating without supervision in rural communities. Nurses and TBAs felt that they had to compete with the midwife for work.<sup>39</sup>

In light of Guatemala's need for SBA and the challenges faced by midwifery historically, careful consideration must be given to the design of this program today. Given that key policy makers have already established the National Vision for midwifery, it is important to understand whether maternal health providers share this vision. This study elucidates misperceptions, attitudes and expectations about the addition of midwifery to the healthcare system by Guatemalan physicians, nurses, midwives and TBAs as compared to the National Vision. By comparing commonalities and discrepancies in their views we identify potential threats and facilitators to this strategy's success in Guatemala.

## Methods

### Recruitment and Sample

This study was conducted within and across six health centers – or *Centros de Atención Permanentes* (CAPs) – in the northern highland departments of Huehuetenango and Alta Verapaz as well as in Guatemala City. These regions were selected due to the active longstanding involvement of the non-governmental organization the Epidemiological Research Center in Sexual and Reproductive Health or CIESAR (its Spanish acronym). CIESAR, together with the University of California San Francisco (UCSF), is implementing *Que Vivan Las Madres* (QVLM), a program aimed at reducing maternal and neonatal mortality in Alta Verapaz and Huehuetenango through increasing skilled birth attendance.

With CIESAR's help, the first author identified key members of the Ministry of Health and other leaders who were highly involved with the design of the midwifery program in the country. Next, the list of all CAPs in both departments was acquired and the CAPs were categorized into three groups according to their driving distance from the departmental capital: within an hour's drive, between one and three, and over three. A random number generator was used to select one CAP per group within both departments, for a total of six selected CAPs. CIESAR facilitated entrée to each CAP by providing a letter of introduction explaining the purpose of the study. Furthermore, two CIESAR employees familiar with the selected CAPs joined the research team.

At each CAP, the director of the center was invited for an interview. Then, following a snowball sampling technique, the director would then identified other physicians and nursing staff that provide maternal health services at the CAP as well as TBAs who collaborate with the CAP. In each CAP, the research team, together with the director of the CAP, explained the nature of the research to CAP staff and sought informed verbal consent before conducting the interview. Interviews were conducted in Spanish. Local translators were used when interviewing TBAs in the appropriate Mayan language, if that was the interviewee's preference. A round of interviews at a CAP was considered complete once all present maternal health providers at that facility had been invited to participate in an interview. In total, 32 of 33 individuals approached for an interview participated, spanning across five different sub-groups: midwives, TBAs, physicians, politicians/key decision makers, and nurses (See Table 1). Interviews lasted between 30 and 90 minutes and were audio recorded.

Number Interviewed	Group Name	Description
4	Professional Midwives	One Guatemalan and one Mexican midwife trained abroad and working with CIESAR, and two midwives in training in Antigua, Guatemala at a school not certified by the MOH
10	Traditional Birth Attendants (TBA)	TBAs already cooperatively working in some capacity with selected CAPs (all female)
4	Physicians	Physicians (3 male and 1 female) employed at selected CAP facilities in Huehuetenango and Alta Verapaz,
3	Politicians/Key Decision Makers	Politicians at the national level and in the Guatemalan Ministry of Health who were influential in the advent of the midwifery school in Guatemala
11	Nurses	Professional (6) and auxiliary (5) nurses employed at selected CAPs in Huehuetenango and Alta Verapaz. All nurses were female except for one male who was a CAP director.
<b>n = 32</b>		

**Table 1. Characteristics of Research Participants**

## Data Collection

Research participants were asked a series of open-ended, semi-structured questions about midwifery. Participants were first asked to define midwifery to gauge the level of knowledge and familiarity each participant had with the profession. Next, the following International Confederations of Midwives (ICM) definition of midwifery was read to the participant: “A person who has successfully completed a midwifery education program that is duly recognized in the country where it is located and that is based on the International Confederation of Midwives’ Essential Competencies for Basic Midwifery Practice and the framework for the ICM Global Standards for Midwifery Education; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title ‘midwife’; and who demonstrates competency in the practice of midwifery.”<sup>22</sup>

After it was clear that the participant understood this definition, the participant was asked to describe how s/he envisioned a midwife working in the community, at the health facility and

with the TBA. The participant was asked to imagine specific roles and responsibilities for the midwife and to describe how a midwife should supervise and be supervised in the health facility. The participant was also asked, also, to describe his or her own role in the provision of maternal health services and to imagine working together with a midwife in the future.

The interview guides were developed in Spanish and customized for the five different subgroups. Questions in each interview guide fell under identical deductive themes, but were catered to match the profession of the respondent. Prior to their administration, the interview guides were field tested for language and flow by the research team. Interviews were conducted until all identified policy makers had been interviewed and the six selected CAPS had been visited. When data collection ceased, theoretical saturation had been reached, meaning that no new information was emerging during the interview process. All 32 in-depth interviews were transcribed in Spanish in Guatemala immediately following the interviews.

This study was approved under the University of California San Francisco's IRB Protocol Number: 14-13057 and the University of California Berkeley relied on this approval under Reliance #873-1.

## **Data Analysis**

Open coding of all the interviews by the first author and a research assistant was conducted in Atlas.ti, which allowed us to capture both inductive and deductive codes. Deductive codes identified were in line with the pre-defined themes in the interview guides, namely: misperceptions around the definition of midwifery; expectations about the midwife's locale, role, and place in the healthcare hierarchy; and attitudes of both resistance and acceptance of midwifery. Inductive analysis revealed additional themes, namely general resistance or acceptance of TBAs; integration or exclusion of the TBA in the health facilities; and the importance of intercultural care. Ultimately, 30 inductive and deductive codes within these themes were established, and all 32 interviews were coded accordingly. After open coding was complete, axial coding was conducted with support of graduate students in Guatemala for the purpose of assuring inter-coder reliability and consistent interpretation of context-specific Spanish language and colloquialisms.<sup>77</sup> Through a process of constant comparison with field notes and memos, codes, and categories, themes were established, in keeping with a modified grounded theory approach.<sup>77</sup>

Next, using a matrix, each individual code was analyzed within each of the five disciplinary subgroups to note the range of answers pertaining to each code within each subgroup. We first performed normative comparisons contrasting participants' attitudes, misperceptions, and expectations for midwifery with the National Vision. Relative comparisons were then made both within and across subgroups, noting commonalities and variants.

The National Vision states that the role and responsibilities of a midwife at a health facility are the following: identification, management, and referral of obstetric complications; family planning services; prenatal, postnatal and newborn care; management of normal deliveries; preventive care; intercultural care; education for women on pregnancy, childbirth, family planning, nutrition and hygiene; lactation consulting; and participation in meetings at the

district level. At the community level, they hope that a midwife will monitor and map pregnant women, conduct outreach, coordinate with community bodies for emergency transportation, and cooperate with TBAs.

## Results

### Misperceptions about Midwifery

When physicians, nurses, and TBAs were asked to define midwifery, most were unable to do so, frequently interchanging the term midwife and TBA. Many believed that a midwife was simply a TBA with a higher level of training enabling her to receive a *carnet*, a card that allows her to practice legally in the health system. In general, the nurses viewed the midwife as another nurse with a specialty in obstetrics, maternal-newborn care and culturally appropriate birthing practices. Below are some excerpts from interviews translated into English.

*“The TBA has had substantial training in theory, and the midwife is the one that learns from her grandmother or from what her mother did. It’s direct knowledge without formal registration or study. They both have not studied; it’s all from tradition, only from tradition.” – Physician (Interview 13)*

*“I believe - but I don’t know if I’m close to the right idea - but I believe that a midwife is a person that has studied nursing; I believe that she has a licensure, I don’t know, I believe that it’s like a specialty.” - Nurse (Interview 21)*

*“A midwife is someone that knows very well how to attend a birth...however she doesn’t have an official title, only the name. She doesn’t have a diploma.” – TBA (Interview 7)*

### Attitudes toward Midwifery

#### *Resistance anticipated by midwives*

Midwives predicted several possible sources of resistance that could arise with their introduction to the health system, such as the possibility of competition for turf between themselves and nurses at health facilities or supervisory challenges with physicians. Midwives also anticipated possible resistance that could come about should they expose the existing poor quality of care at health facilities or disturb the status quo in general. Furthermore, they worried that they could face opposition from TBAs due to different worldviews and training backgrounds. They also expressed that health facility staff may resist their promotion of intercultural care at the facility.

*“It’s difficult because a nurse told me that we (midwives) are going to replace the physician and the whole world. So I said, ‘No, no, no.’ So, it’s very difficult... I want them to give me my own exam room within the CAP. They would never let me.” – Professional Midwife (Interview 35)*



### *Overall acceptance by frontline health workers*

However, when physicians, nurses and TBAs were asked about their general attitudes towards midwifery as a profession, no single respondent expressed personal unwillingness to work with a midwife. Yet, some expressed concern about resistance from other health providers. One nurse mentioned concern that the midwife would encounter resistance from physicians, as they had a reputation for creating friction with nursing staff at that particular health facility.

*“Yes, it would exist (resistance) because I live it. I am a professional nurse, and, at times it is a challenge with the physicians. I’ll say it again: yes, at times there will be resistance (with physicians).” — Nurse (Interview 21)*

Interestingly, while respondents had expressed concern over resistance from physicians, the physicians themselves mostly expressed acceptance to midwives joining the health facility staff. However, among some physicians, this openness was conditional upon midwives falling under the physicians’ supervision.

*“Midwives would be well received because we all take into account that in our country, in our culture, there are many, many pregnancies ... They have nine, eight, seven children and I think that in our population, the midwife has the capacity to be able to resolve or attend to women, whatever place where she is needed, I think, that would be acceptable.” - Physician (Interview 6)*

All sub-groups expressed their excitement that a midwife would help improve TBA relationships and intercultural care practices at the health facilities.

*“The midwife can have a relationship with the TBAs, we (nurses) should have an equal relationship with them in order to bring about better care for the patients, right? Then we could work united and have the same effect.” - Nurse (Interview 16)*

Each sub-group also mentioned that they shared the same vision as a midwife: to improve the health of the population and to care for newborns and pregnant and delivering women. A common theme among all participants was the need for the “support” and “help” that a midwife would bring to the understaffed health facilities, as a much-needed human resource. They also saw her as an expert in her field who could bring specialized, women-centered care to the facilities, a type of care many stated that was not currently provided in health facilities. Others were excited about the prospect of the midwife teaching other health providers about identification, management and referral of obstetric emergencies.

*“Here in the health center, usually, it’s only us auxiliary nurses on call, and we have physicians, but they only come at night and during this month there are only two days when the physicians come and the others do not come. And we have had complications because we don’t have the knowledge if patients come with complications, but if there were a midwife, her service would be a great help because we would act on time ... there are other danger signs that we do not know, and with a midwife we will reduce the time it takes for us to attend to patients.” — Auxiliary Nurse (Interview 23)*

## Expectations: the Midwife at the Health Facility

### *Supervision in the health facility*

Supervision of, or by, midwives is a key component to consider in an already highly hierarchical medical system. Two policy makers responded that physicians could supervise the midwives. One stated that this supervisory role belongs to the nurse in the health facility where the midwife is working. Another suggested that the relationship between physician and midwife should not be supervisory but horizontal. It appears that there is not a clear vision at the national level of how a midwife should be supervised within the hierarchy of the Guatemalan healthcare system.

*“What we cannot do is ignore the structure of the health system. There is a professional nurse who is the one in charge and above her is the physician, but the relationship should be horizontal because there needs to be a recognition of the work of nurses in this country.” – Key Policy Maker (Interview 4)*

Midwives themselves differed on who was best positioned to supervise them. One stated that she should not be supervised at all, preferring to work in a team of “mutual learning” with others. Another suggested that a midwife at the district level should supervise them.

*“It only should be team work. I don’t want to see it like supervision, because when we speak of supervision, one can see it as fatal. But teamwork and support would be good.”- Professional Midwife (Interview 32)*

It is important to note that all four physicians believed the role of supervision of midwives falls to physicians or the director of the CAP. While all physicians mentioned the importance of midwives participating in labor and delivery at the health facilities, two physicians stated that she should do so only under the supervision of a physician, not independently.

*“We are very hierarchical; I think that the rotating physician is the one from the staff who should do it; he has the most experience of all the staff that are there.” – Physician (Interview 6)*

Nurses’ opinions varied, with some stating that it should be the role of the physicians to supervise midwives, while others believed this was the role of the district nurse or district coordinator. A few nurses stated that they did not know who was best suited for this position.

*“If there were one (a midwife) here, the person (to supervise her) would be the physician or the district nurse during the weekends, or during the week, which depends on the schedule she (the midwife) would follow. Now if she had a night shift, it would be the physician on call that would (supervise her).” – Nurse (Interview 9)*

Participants were also asked to identify which personnel the midwife should supervise. Policy makers agreed that the midwife is not meant to supervise TBAs.

*“I believe that instead of supervision, it should be about looking for a way of bringing together different people’s work in a harmonized way because they have to complement each other... The TBAs could look to health facility staff and train them and the health facility staff would train TBAs. ... I see this as feasible, possible and even urgent.” – Key Policy Maker (Interview 4)*

Midwives clearly expressed that they should not supervise TBAs, but they did not have clarity about which personnel they should supervise at the health facility.

*“I don’t believe that it’s going to be easy at first, but to me it depends on the strategy for working with TBAs. I believe that instead of ‘supervision,’ we shouldn’t call it that, because when we speak of supervision, we are already putting up barriers. So, I would handle more like a mutual learning, because maybe they (TBAs) can learn things from me, but they can also teach me things.” – Professional Midwife (Interview 34)*

Physicians and nurses differed from policy makers regarding whom a midwife should supervise. Some expressed that midwives should supervise auxiliary nurses and TBAs; others did not know. There was no clear National Vision and little alignment on this topic across all sub-groups regarding supervision of or by midwives.

### ***Role in the health facility***

Since physicians and nurses will work alongside the midwife and nurse at health facilities, their opinions for the midwife’s role at the health facility were compared with the National Vision. The physicians’ vision for the role of the midwife generally aligned with the National Vision. Nurses elaborated on a wider range of specific tasks for the midwife in the health facility, beyond the National Vision responsibilities, such as training other health workers and educating relatives about women’s health. They also suggested that midwives play a role in quality control for clinic-based deliveries, working closely with the birth team to monitor and improve birthing practices at the facility, including vertical birth.

*“She could help us with three things: with direct care to patients that come to the facility in labor; assistance with birth, postpartum and with newborns; and also, sharing their experiences with the health personnel, giving trainings, possibly to the health personnel and also to the TBAs”. – Nurse (Interview 21)*

### **Expectations: The Midwife with the TBA**

The National Vision, in accordance with the Safe Motherhood Law, is that the midwife would provide training for TBAs on identifying danger signs, improve the acceptance of TBAs in health facilities, and strengthen the referral system and communication between community and health facility. Policy makers spoke of the midwife’s role in cultural exchange programs with TBAs, as well as mentorship and “co-learning” between health facility workers and TBAs.

*“She (the midwife) is going to have much much more communication with the TBA than with the auxiliary nurse who has her hypodermic needle and gives vaccines and all her work is direct care. She is going to work much more with the TBA and with the obstetricians. So, this little group has to be very connected and constantly informing the director of the health center so that they do not lose communication.” – Key Policy Maker (Interview 33)*

Physicians mentioned the importance of a cooperative relationship with TBAs, specifically suggesting midwives speak the local Mayan language and teach TBAs about Western medicine, general preventive medicine and danger signs. The physicians’ vision at times

appeared unidirectional, with the midwife playing a supervisory, professorial role with the TBAs, providing trainings with the ultimate goal of improving relations with TBAs in order to increase the number of referrals from communities to the health facilities.

*“I think that if a midwife were to exist one day, she should look out for our traditional birth attendants... we, as a health center, give them (TBAs) trainings. We give them the option to be able to see the birth; when it’s a vertical birth, they attend the vertical births, although with our medical surveillance.” – Physician (Interview 26)*

Overall, nurses were more explicit than physicians in their descriptions of the midwife’s role as liaison with TBAs, describing the need for the midwife to respectfully mend relationships with TBAs to improve referrals, as well as to foster a relationship of “co-learning” between them. Some nurses suggested that the midwife physically accompany the TBA during a referral and observe the TBA during deliveries at the health facility, ideas not presented by key policy makers. Furthermore, most nurses talked at length about the important role the midwife should play in convening TBAs with health facility staff to collaborate and develop mutual respect. One nurse felt that it was critical that the midwife speak the local language and regularly meet one-on-one with TBAs in the communities in order to improve relations. Overall, the nurses seemed to have a greater appreciation for the delicate nature of the relationship between health facility staff and TBAs than the physicians. Like the physicians, nurses expressed the need for the midwife to train the TBA from a biomedical standpoint.

*“So, the midwife covers the whole field, and the traditional birth attendant is only going to work with her traditions, even giving coffee to the newborn as soon as it is born because it’s tradition ... and this isn’t good. And the professional (midwife) will know this.” – Auxiliary Nurse (Interview 18)*

Generally, the TBAs interviewed were interested in learning Western medicine and being supported by the midwife in their work. They mentioned their desire for the midwife to provide them with materials such as scissors, sutures, soap and blood pressure cuffs, a practice more prevalent in the past when there was more government and international support for TBA training. They asked for visits from the midwife in the community and articulated their need for constant training. Most of their answers pertained to the individual TBA’s need for support to better perform her job. They hoped that the midwife would advocate for them at health facilities, specifically with physicians, in order to ease referrals and improve the linkage between the community and the health facility.

*“Since she is a professional, she would be, for those of us here in the community, like a bridge, like a link, and she could be teaching us daily and having her here with us, well, she is going to teach us more, right? ... It would be good if she would come.” – TBA (Interview 14)*

## **Expectations: The Midwife in the Community**

Key policy makers also had a vision for the midwife’s role in rural communities. All policy makers mentioned the importance of the midwife monitoring and mapping pregnant women in the community, carrying out some form of community outreach, and coordinating with communities to improve emergency transportation systems. One area that was not explicitly

described by policy makers was whether midwives would be encouraged to attend home births, though they did discuss home and community-based antenatal and postnatal care.

Midwives themselves disagreed on their level of involvement at the community level. One midwife strongly held that community outreach was too time-consuming, preferring to be based out of the health facility instead. Another disagreed with this position.

*“What good does it do for me to be in the community for 24 hours 365 days a week? I would go, go, go to accompany a woman. I come back, and I go back... There are many people that would still opt for another kind of care, even if I am with them. ... It will still be the same... TBAs will still attend 80% of births. I think that we should spend the majority of our time in the CAP.” – Professional Midwife (Interview 35)*

*“It has to be like this. You can’t work far away; you can’t do it. Practically, you have to be a part of that place (the community), because the people have to start to get to know you. And you have to gain the trust of the people, and you have to work with them, together with the TBA. So, you cannot do that from a distance. No, this is impossible. You have to be in the community, whether you like it or not.”*  
– Professional Midwife (Interview 32)

Physicians’ ideas generally were in line with the National Vision, save for their failure to mention monitoring and mapping pregnant women in communities. They stated that midwives should carry out home visits in communities for women with high-risk pregnancies and specifically suggested that TBAs and midwives conduct “pregnancy circles,” groups of pregnant women who meet regularly in the community to discuss pregnancy and childbirth with one another. One physician even suggested that midwives assist with labor and delivery in communities.

*“She (the midwife) would have a lot of work: home visits to care for pregnant women, detection of danger signs, pregnancy circles, visits to postpartum women, and I include carrying out deliveries.” - Physician (Interview 26)*

Nurses were fully aligned with the National Vision for the midwife in the community. Three nurses also suggested that midwives carry out home visits for high-risk pregnancies and general prenatal care in a central location in the community, together with TBAs. Some nurses suggested that midwives conduct home births together with TBAs. Additionally, they proposed that the midwife coordinate with community leaders, COCODES (*Consejos Comunitarios de Desarrollo Urbano y Rural*, representative bodies at the community level), mayors and health commissions. In general, the nurses seemed cognizant of friction at different levels of health care and focused on the important role the midwife could play in improving the relationships along the continuum of care from community to health facility.

*“The midwife could go to the center of commerce, for example, to carry out a prenatal clinic with pregnant women there, and since the pregnant women are accompanied by their TBA in the community, she can go visit pregnant and postpartum women in their homes.” – Auxiliary Nurse (Interview 23)*

TBAs’ ideas for the midwife in the community were mostly in line with those of the policy makers. One important difference is that no TBA mentioned the midwife monitoring and mapping of pregnant women in communities, since they view this as their role. TBAs also suggested that midwives carry out pregnancy circles and conduct home births together with

them, viewing this as an opportunity for learning and collaboration among pregnant women, midwives, and themselves.

*“It would help us (to have a midwife), to be able to attend births together here (in the community). This would be a good relationship, together, because there would be two different ideas combined into only one ... there wouldn’t be more maternal deaths.” – TBA (Interview 24)*

## **Expectations: The Midwife and Intercultural Care**

Policy makers envision the midwife playing a key role in the implementation of intercultural care. In addition to coordination with TBAs, policy makers described the midwife as being trained in both Western and traditional medicine, and, as such, able to perform vertical, culturally appropriate deliveries, orient staff to meet national norms for intercultural care, and modify delivery rooms to be more culturally appropriate, placing indigenous people at the center of care.

All physicians articulated that midwives could provide intercultural care through culturally appropriate birthing practices, mentioning the need for Mayan languages to be spoken at the facilities and “co-learning” between traditional and biomedical health systems.

*“We try to do the appropriate, culturally appropriate thing, in accordance with the system that they (Mayan communities) use in their homes, in their towns, in the rural areas. We want the Mayan women to feel like they are at home and for the TBA, with the midwife’s help, to attend the birth. TBAs are able to attend vertical births; they have helped us a lot with learning about this type of birth.” – Physician (Interview 26)*

Nurses spoke of TBAs and intercultural practices as if they were inextricably linked. They provided more specific suggestions for how intercultural care should be implemented, suggesting that the midwife together with TBAs could make woman-centered, culturally appropriate births available at health facilities in keeping with Mayan birthing practices. Another nurse talked about the importance of allowing husbands and family members to enter the delivery room, something that was not mentioned by the other groups.

*“Yes the TBAs should work here because they would help us with the language, and the women would be able to experience what they experience at home with the TBA, because they (TBAs) give them water made from natural plants; they give them massages; they teach them to breastfeed; and they bathe them in the temascal... the pregnant women feel more trust if the TBAs attend their birth. Our supervision would be a support for them and they would help us like we help them.” – Nurse (Interview 20)*

## **Discussion**

This study identifies facilitators and threats to the implementation of midwifery in rural Guatemala, both of which need further consideration to achieve a successful program. It is encouraging that the vision for midwifery among physicians, nurses, and TBAs generally reflects that of the key policy makers. Overall, there were more areas of agreement than disagreement about the midwife's role. The stakeholders' general recognition of the critical shortage of maternal health providers as well as the need to address maternal mortality in

Guatemala contributed to uniformity of vision and common goals among the stakeholders, which will be instrumental in the success of midwifery in Guatemala.

It is noteworthy that local political will exists which has led to this unique chapter in Guatemala's history – the opening of the first government recognized and supported midwifery school in country since 1960. According to Shiffman and del Valle, national political factors, such as its unstable political history, the repressive nature of the state, and the inability for civil society to flourish, have greatly contributed to failures to address maternal mortality in Guatemala to date.<sup>46</sup> Therefore, for key political leaders to have united around midwifery and overcome such obstacles to successfully open this school is an accomplishment that merits acknowledgment.

Furthermore, all sub-groups of stakeholders, TBAs included, voiced that the midwife could be a key figure in the provision of intercultural care, which includes fostering relationships between TBAs and supporting culturally appropriate birthing practices in facilities. Given the openness of all stakeholders to this particular role of the midwife, the addition of the midwife to the Guatemalan healthcare system presents a unique opportunity to correctly bring about these long overdue changes.

We identified several misperceptions and negative attitudes that constitute potential threats to the successful establishment of midwifery in rural Guatemala. Only the key policy makers and midwives themselves clearly understood midwifery as a profession. Essentially no other respondents were able to define midwifery accurately. Once the correct description of midwifery was given to participants, they viewed her as a key human resource capable of carrying out a wide array of tasks. The range of responsibilities suggested by respondents is lengthy and potentially unrealistic for the midwife, which could be burdensome to the midwife and create redundancy within the health care workforce or turf wars. It is imperative that careful guidelines for midwifery care be developed and disseminated to stakeholders prior to their eventual deployment.

The results of this study demonstrate the highly hierarchical nature of the Guatemalan healthcare system, which affords authority to the physician, who supervises nurses. TBAs fall outside this system altogether and, as such, are disempowered, having essentially no influence in the health facilities. It has only been with the advent of civil society groups advocating for the rights of the TBA at the national level that TBAs have received any recognition in the formal health sector at all, but they still operate at the fringes of this system. It is clear through the interviews that all providers recognize these power dynamics and work within this hierarchy, with varying degrees of ambiguity and frustration depending on the position of the provider interviewed.

A clear National Vision for supervision of the midwife is lacking, and this ambiguity could lead to tensions in the health system hierarchy. The wide range of answers within and across sub-groups regarding supervision reflects a lack of consensus on this topic. Physicians expressed a desire for the midwife to fall under their supervision, whereas other stakeholders – policy makers included – presented other supervisory schemes, including the midwife being supervised by a nurse or someone at the district level. Moreover, while the interviewed policy makers stated that the midwife ought not supervise TBAs, the midwife's role may be perceived as supervisory by TBAs, which could lead to further strain in working

relationships. Prior to the introduction of midwifery, it is critical to establish how the midwife will fit within the healthcare system, including the reporting structure.

Many responses reflect individual concerns over threats to their own profession's scope of work, territory or identity, which could render them dispensable. Turf issues are particularly noticeable among both professional and auxiliary nurses and TBAs, as there was significant overlap in the types of roles all these cadres can fill. Tensions between health workers at health facilities could arise should the midwife take on responsibilities that had previously belonged to other providers.

Additionally, there was a lack of consensus on the role that the midwife would play in the community and with TBAs, in particular whether she should attend home births or monitor women in the community, both tasks which the TBA consider to be theirs. The failure of policy makers to define the midwife's role in home births indicates that their vision for this aspect of a midwife's role is not clearly defined. This could lead to confusion and turf wars between TBAs and midwives, which could further jeopardize relations with TBAs. It is important that the midwife not be seen as a threat to other providers in both the community and health facility but rather as a distinct, complementary provider who has the same goal to improve maternal health and reduce the burden on overstretched providers.

Respondents revealed consensus regarding the need for the midwife to improve ties between TBAs and health facilities themselves, if nothing else but for improving referrals from the community to the health facility. However, there were different opinions on the extent of the TBAs' integration into health facilities, with noticeable resistance from some physicians. These physicians viewed the relationship with TBAs in a unidirectional way, with training, supervision, and monitoring coming from the health facility to the TBAs. If a midwife is expected to improve relations and include TBAs in culturally sensitive clinic-based care, resistance may arise from physicians, particularly if physicians are supervising midwives. Standardization of the role of the TBA in health facilities should be established prior to developing specific tasks for the midwife regarding her work with TBAs in health facilities.

## **Limitations**

Limitations to this study include a small, purposive sample, which is not representative of physicians, nurses, TBAs, policy makers or midwives generally. However, the perceptions of these respondents are of utmost importance because the respondents are the very staff working in the rural CAPs where the needs is greatest and where midwives will directly work in the near future. Another important consideration is the gender of the study participants. Every nurse interviewed was female, save for one male nurse who also served as director of the CAP. Three of the four physicians were male. Therefore, in a highly hierarchical medical system in a male-dominated society, further analysis from a gendered lens would provide greater insight into gender dynamics at play among health care providers that may influence their perspectives. The selection of TBAs for interviews presents another limitation to the study, in that they were TBAs who are already collaborating with health facilities. TBAs without ties to health facilities were not included. However, since this study sought to explore perspectives of stakeholders who would work with midwives, the TBAs selected are those positioned to interact with midwives at health facilities.



Furthermore, three of the CAPs included in the study were located in Alta Verapaz, even though there are no immediate plans for midwives to work in this district. At the time of data collection, however, the Guatemalan government had been planning to open a midwifery school in Alta Verapaz as well as Quiché and Huehuetenango. Due to funding and political challenges, only the school in Huehuetenango is currently underway. Another limitation for the study was possible social desirability bias from the respondents. Given that interviewees were being asked about their attitudes, expectations, and misperceptions of midwifery with a professional midwife present during the interview, it is possible that the respondents expressed open acceptance to midwifery in order to present themselves favorably to the interviewer. While this is possible, all interviews were confidential and all questions were purposefully phrased in a neutral, non-leading way to minimize this bias. Furthermore, only the policy makers were aware of the midwives' background during the interview. To mitigate social desirability bias, the other respondents were not informed that midwives were present until after the interview was completed.

In addition, it is recommended that further studies be conducted to assess rural, indigenous women's perspectives on the addition of midwifery to the Guatemalan healthcare system, as they were not included in this study. Ultimately, it is they who will be those seeking out care from professional midwives.

## **Conclusion**

Midwifery has great potential to improve intercultural care practices and reduce maternal mortality by addressing the shortage of skilled birth attendants in Guatemala. This study demonstrates facilitating factors to the successful deployment of this cadre of health worker. Yet, the National Vision for midwifery is incomplete, forming an ambiguous road map for integrating midwives into the health system, in the community, and with TBAs. Furthermore, at times, maternal health providers' visions conflict with the National Vision and with one another, posing a threat to the program's success. It is imperative that a clear scope of work and standards for supervision for the midwife be established at the outset of the program, incorporating viewpoints of all health providers.

Given Guatemala's long hiatus with midwifery, the MOH needs to carefully consider historical and present-day challenges and capitalize on facilitators that could lead to the realization of midwifery in Guatemala. This study is the first of its kind in Guatemala, investigating the country's readiness for the deployment of midwives, and represents a benchmark by which future investigations of midwifery in this country and others in Latin America can be compared to document the advent and development of a new cadre of health worker.

## Chapter 4.

# The Future: Recommendations for Sustainable Midwifery in Guatemala

### Abstract

**Background.** Guatemala is in the process of opening the first public, government-sponsored professional midwifery school in country since 1960. Historically, midwifery in Guatemala has encountered numerous challenges that ultimately led to the program's closure. Today, as program planners are in the midst of designing the new midwifery program, it is imperative to consider possible impediments to sustainability the program will face in order to inform program design and increase its likelihood of success. Schell's sustainability framework assesses a program's capacity for being successfully sustained over time, given a number of internal and external domains.

**Methods.** We explored the presence of Schell's sustainability domains in the planning stages for Guatemala's midwifery program by analyzing the in-depth interviews from Chapter 3's qualitative interviews with the key decision makers and professional midwives (n=7). We matched the previous study's pertinent open codes with the nine a priori domains from the Schell Sustainability Framework and analyzed the content of the specific coded segments within each domain. We triangulated this information with documents collected for Chapter 2 and identified facilitators and impediments to sustainability. The identified impediments informed our recommendations.

**Results.** Our study revealed the presence of facilitators that give the program the capacity for sustainability, particularly within the political support, strategic planning, and program adaptation domains. There were also promising facilitators within the organizational capacity and funding stability domains. Yet findings also revealed the program's weak partnerships and poor communications that pose significant impediments to the program's sustainability. Program evaluation and public health impact were not discussed in the interviews, which may be a construct of the interview process but merit further consideration. We present recommendations to address identified impediments.

**Conclusions.** At the launch of this important program, it is critical that designers of the midwifery program consider and address all the impediments identified in order to sustainably provide midwifery services in Guatemala. Program planners should consider the recommendations and carry out further research to inform sustainability of the program.

## Introduction

Guatemala has historically recognized the need to bridge the gap between health facilities and traditional birth attendants (TBAs) in order to improve maternal health. In 1895, Dr. Juan José Ortega opened *La Escuela de Comadronas* or The Midwifery School that operated out of the University of San Carlos's medical science department. The school was the first of its kind in Central America, boasting the country's first female university graduates.<sup>39</sup>

In 1903, a general nursing school was also founded in Guatemala, and in 1940, President Jorge Ubico Castañeda, declared that the nursing and midwifery schools merge, forming the *Escuela Nacional de Enfermeras* or the National Nursing School. This new arrangement led to a change in curriculum. Nurses were trained for two years with the option of one additional year of obstetric training to become nurse midwives. Many of the original creators of the Midwifery School vocally rejected this new model, stating that one year of obstetric training was insufficient. Opponents to the merge claimed that the professional midwife needed to remain a distinct profession from nursing, with nurses working closely with doctors, and midwives able to work alone in rural communities unsupervised. Midwifery advocates called for the midwifery school to be reopened.<sup>39</sup>

This tension eventually led to a re-opening of the Midwifery School as a separate entity in 1946 with a redesigned three-year training program, imitating other Latin American midwifery programs, such as that in Venezuela, Argentina, and Mexico. This school not only clashed with the nursing school, but tensions arose with TBAs as well, since a prominent goal of the Midwifery School was to produce midwives to eventually replace TBAs.<sup>39</sup>

The school was fully operational for nearly a decade before it encountered political problems in 1955. Opportunities for professional midwife graduates waned. Hospitals modeled after US hospitals, began to depend on specialized medical doctors and professional nurses to attend births, and prohibited professional midwives from doing so without a physician's supervision. Eventually, in July 1955, President Carlos Castillo Armas declared the Nursing School to be the only one of its kind in Guatemala. It was decided that nursing programs with specializations in maternal health would be sufficient to address the maternal health needs of the country. In 1956, the Midwifery School stopped accepting new applicants, and the doors permanently closed in 1960.<sup>39</sup> Guatemala has not had a formal training or licensure program for professional midwives since then.<sup>12</sup> Thus, while the Midwifery School provided much needed education to women and improved maternal health services, midwifery as a profession has historically conflicted with physicians, nurses, and TBAs in Guatemala.

Now is a unique time for maternal health in Guatemala. With support from UNFPA, USAID, JHPIEGO, and UNICEF, the *Acuerdo Ministerial No. 538-2013*, created on December 12, 2013 legally established that the Ministry of Health (MOH) would cooperate with universities and other institutions to create a human resource for health: the professional midwife. This monumental governmental agreement laid the groundwork for reopening the first public professional midwifery school in country since 1960 for the purpose of providing more Guatemalan women – particularly rural indigenous women - quality culturally appropriate skilled birth attendance.

At the time of writing of this chapter, the professional midwifery school itself was in the beginning stages of opening but not yet operational. The University of Da Vinci in Huehuetenango will host the program, but many details have yet to be finalized. Instructors will be trained under the tutelage of professional midwife instructors from the Catholic University of San Martín de Porres from Perú, who will in turn instruct accepted midwifery students. The admissions committee is currently reviewing applicants for the program, the instructors are being trained, and the inaugural classes for the midwifery students are expected to begin soon. Midwifery students will be expected to study for three years, after which it is expected that the graduates be deployed to work in rural Huehuetenango.

Given midwifery's historical challenges leading to the ultimate closure of the first midwifery school in Guatemala, it is imperative to consider the potential obstacles to the success of the new program while it is still being developed. In the field of public health, there is increasing interest in achieving and measuring a program's sustainability, yet only recently has a body of literature emerged in an effort to define and measure sustainable programs.<sup>78-81</sup> Scheirer and Dearing define sustainability as "the continued use of program components and activities for the continued achievement of desirable program and population outcomes."<sup>79</sup> Schell and colleagues go beyond measuring and defining sustainability in an effort to predict capacity for sustainability, arguing that sustainability itself comes about when a particular set of domains are in place from the program's beginning.<sup>82</sup> Theirs is an intentionally broad framework, extending beyond the inner-workings of the program itself to consider the organizational and systemic factors in which the program is situated as well.<sup>82,83</sup>

Schell's sustainability framework assesses the likelihood of a program's activities being successfully sustained over time, given a number of internal and external domains. Internal domains are those that are managed or controlled within the program itself and include strategic planning, organizational capacity, program adaptation, program evaluation, and communications. External domains fall outside the program itself and are the following: funding stability, political support, partnerships and public health impact. Schell suggests that all these domains are interrelated and must be considered at the outset when developing a program.<sup>82</sup> Using Schell's framework, the aim of this chapter is to assess the sustainability of the current midwifery strategy in Guatemala based on how planners are currently developing the program. We will then present recommendations to increase the capacity for sustainability based on identified impediments to sustainability.

## Methods

We explored the domains of Schell's sustainability framework for the midwifery program's planning process through analysis of the interviews that informed the qualitative study in Chapter 3. In-depth interviews (n=32) were conducted with physicians, nurses, and TBAs in six health centers and with key decision makers and midwives in Guatemala City. The original aim for these interviews was to elucidate misperceptions, attitudes and expectations about the addition of midwifery to the healthcare system. Although interviewees were not specifically asked about sustainability elements of the midwifery program, interviews with four key decision makers in Congress and the MOH and three professional midwives revealed key information, attitudes and content related to sustainability. Although all 32 interviews were reviewed and analyzed, only seven interviews informed this chapter's results.

As described in Chapter 3, the interviews from the earlier study were transcribed, open coded and analyzed using a thematic analysis. For the study in this chapter, we matched the previous study's pertinent open codes with the nine a priori domains from the Schell Sustainability Framework (see Table 1). Once we identified relevant open codes, we returned to the data in Atlas.ti to analyze the content of the specific coded segments within each of Schell's domains. Respondents revealed plans in place for the establishment of the midwifery school as well as their perceptions about the midwifery program. We also triangulated the information gathered with documents collected for Chapter 2. We identified facilitators and impediments to sustainability that we then used to inform our recommendations.

Schell Framework <sup>82</sup>	Open Codes from Chapter 3
<b>Internal Factors</b>	
<b>Strategic Planning:</b> the process that defines program direction, goals and strategies	Training Process for Professional Midwifery The Process Itself of Opening a Midwifery School History of Professional Midwifery in Guatemala Resistance to Pro Task sharing/Team work Integration/Acceptance of Professional Midwives Locale of the Professional Midwife Challenges to Opening a Midwifery School
<b>Organizational Capacity:</b> the resources needed to effectively manage the program and its activities	Quality of Care at Health Facilities Supervision of Professional Midwives Hierarchical Relationships
<b>Program Adaptation:</b> the ability to adapt and improve in order to ensure effectiveness	Intercultural Care Different Models of Professional Midwifery Characteristics of the Professional Midwife Herself Role of the Professional Midwife Women-Centered Care from the Professional Midwife Professional Midwife Coordination with TBAs
<b>Program Evaluation:</b> the monitoring and evaluation of process and outcome data associated with program activities	N/A
<b>Communications:</b> the strategic dissemination of program outcomes and activities with stakeholders, decision-makers and the public	Myths/misperceptions about Professional Midwifery
<b>External Factors</b>	
<b>Funding Stability:</b> making long-term plans based on a stable funding environment	Institutional Collaboration
<b>Partnerships:</b> the connection between program and community	Political Economy Professional Midwife Coordination with TBAs
<b>Political Support:</b> internal and external political environment which influences program funding initiatives and acceptance	MOH Policies Towards Provision of Maternal Health Services Institutional Collaboration
<b>Public Health Impacts:</b> the health attitudes, perceptions and behaviors in the area it serves	Maternal Mortality/Morbidity in Guatemala The Need for a Professional Midwifery School

**Table 1. Analysis Plan with Chapter 3 Open Codes and Schell's Domains**

# Results

## Internal domains

We identified facilitators and impediments to each of Schell's internal domains (those that are within the control of the program itself) as demonstrated in Table 2.

Schell's Internal Domains	Facilitators to Sustainability	Impediments to Sustainability
<b>Strategic Planning:</b> the process that defines program direction, goals and strategies	<ul style="list-style-type: none"> <li>History of midwifery in Guatemala</li> <li>Midwifery school locations and admission requirements planned</li> <li>ICM competency based curriculum</li> <li>Optimism, clear unity of vision and end goal among key decision makers</li> <li>General agreement about the future role of graduates in health facilities</li> <li>International collaborators and supporters</li> </ul>	<ul style="list-style-type: none"> <li>Previous midwifery school encountered resistance and closed</li> <li>Vacillating plans regarding site locations and host university</li> <li>Unstable clinical rotation sites</li> <li>Disagreement about the role of the professional midwife in communities</li> </ul>
<b>Organizational Capacity:</b> the resources needed to effectively manage the program and its activities	<ul style="list-style-type: none"> <li>Technical Commission on Midwifery within the National Reproductive Health program exists</li> <li>Local universities present and willing to host the midwifery program</li> <li>Curriculum input from midwifery school in Peru</li> </ul>	<ul style="list-style-type: none"> <li>Lack of midwifery expertise in country to guide the curriculum development</li> <li>Non midwife instructors to train midwifery students</li> <li>Slow and unclear process to train local instructors</li> <li>Unclear supervision mechanisms for and by midwives</li> </ul>
<b>Program Adaptation:</b> the ability to adapt and improve in order to ensure effectiveness	<ul style="list-style-type: none"> <li>MOH awareness of importance of intercultural care and collaboration with TBAs</li> <li>Admission requirements delineated by law require that applicants be indigenous women originating from rural Huehuetenango and speak a Mayan language</li> <li>MOH understands need for facilities to change and incorporate intercultural care</li> <li>Collaboration with the <i>Unit of Indigenous Populations' Health Care and Interculturality</i> during development of midwifery program</li> </ul>	<ul style="list-style-type: none"> <li>Unclear plan for integrating traditional medicine into the professional midwifery training curriculum</li> <li>Unclear plan for midwife-TBA collaboration</li> <li>TBAs not included in design of midwifery program</li> <li>Resistance to intercultural care in health facilities by existing staff</li> <li>Unclear if Peruvian midwifery model will be modified for the Guatemalan context</li> </ul>
<b>Program Evaluation:</b> the monitoring and evaluation of process and outcome data associated with program activities	<ul style="list-style-type: none"> <li>No facilitators mentioned</li> </ul>	<ul style="list-style-type: none"> <li>No mention of the importance of monitoring and evaluating the program</li> </ul>
<b>Communications:</b> the strategic dissemination of program outcomes and activities with stakeholders, decision-makers and the public	<ul style="list-style-type: none"> <li>Clear, unified understanding of professional midwifery by Ministry stakeholders</li> <li>No communication plan described</li> </ul>	<ul style="list-style-type: none"> <li>Unclear understanding of professional midwifery by physicians, nurses, and TBAs</li> <li>Absence of dissemination plan about midwifery to health facilities and the public</li> </ul>

**Table 2. Identified Facilitators and Impediments to Sustainability within Schell's Internal Domains**

## 1. Strategic Planning

### *Facilitators*

Schell defines strategic planning as “the process that defines program direction, goals and strategies.”<sup>7</sup> Certain themes pertaining to this domain emerged in interviews. Key decision makers expressed a united vision and end goal for midwifery, as described in Chapter 3: to improve the continuum of care from the community to the health facilities for rural women and ultimately reduce maternal mortality in Guatemala.

Key decision makers agree that they envision the midwife working at all levels of the health system: the community, health post, health center and hospital. There is also general agreement across all respondents about the responsibilities of the midwife in the health facility: identification and management/referral of obstetric complications, family planning services, prenatal, postnatal, and newborn care, management of normal deliveries, preventive care, education and counseling for women on pregnancy, childbirth and family planning, nutrition and hygiene, lactation consulting and participation in district level meetings.

Another key facilitator within the Strategic Planning domain is the fact that there is historical precedent for professional midwifery in Guatemala. Lessons can be learned from the successes and failures of this school to inform and build the current program.

*“In reality, midwifery is not a new process in Guatemala that was just now born. In fact, in 1883, we’re talking more than a century ago, the president at this time Justo Rufino Barrios, created a midwifery school ... The midwives that graduated are those that had studied for three years and those that did four years...They could attend births with their hands, but they could not do surgical procedures.” - Key Decision Maker, Ministry of Health*

Another facilitator within the Strategic Planning domain of the framework is the overall sense of optimism and confidence that stakeholders expressed when discussing the launch of the midwifery school.

*“This school is the official school that this country is launching for midwifery... we hope that in a short time we will have the students working on the curriculum.” – Key Decision Maker, Congress*

Key decision makers described a careful planning process for the locations of the midwifery schools. The plan is to establish equal midwifery training programs in universities in Quiché, Alta Verapaz and Huehuetenango, as those were the areas designated by the Ministry of Health to have the greatest needs in terms of maternal mortality with MMR of 196, 207, and 266, respectively.<sup>13</sup> Over a third (36%) of all maternal deaths in the country take place in these three departments alone every year.<sup>13</sup> Furthermore, in their strategic planning process, key decision makers established well-defined admissions criteria for all accepted applicants.

*“The admission criteria are already well defined...They must pass the psychological university exams and all the academic requirements...We respect and know how far we should go and what responsibilities belong to the university...We are giving the technical support. They help us revise the Mayan curriculum and define the courses, the credits, and all this. We are working together and have a plan of action and a time frame, because the time frame is what really worries us.” - Key Decision Maker, Ministry of Health*

Another facilitator pertaining to strategic planning is the presence of a plan for the training process itself for midwifery students. Under the guidance of USAID, UNFPA, and the Catholic University of San Martín de Porres from Perú, the Guatemalan MOH is in the process of establishing the general format of the midwifery program curriculum. By design, the midwifery students will attend three full years of classes based on the International Confederation of Midwives (ICM) seven competency areas. The first two years were to be dedicated to coursework and the third year devoted to a practical clinical rotation.

*“The first two semesters are about midwifery and other courses, and in the third and last year it is all practical ... The specific contents are already in the process of being finalized. We already have defined the nature of each course and the instructor for each course and the global (ICM) competencies – there are seven for Guatemala- that have to be adapted and developed.”– Key Decision Maker, Ministry of Health*

### ***Impediments***

As discussed in Chapter 3, key decision makers and other stakeholders alike had different expectations for the role of the professional midwife in the community, which could prove to be an impediment to the sustainable implementation of the program. Additionally, as described above, the promotion of a physician-based model for childbirth in Guatemala may have ultimately led to the midwifery school’s closure in 1960. This resistance to midwifery may resurface impeding the establishment of a sustainable midwifery program in Guatemala.

*“In 1956, specialized physicians began to come to Guatemala from outside the country. Exclusively obstetricians, some coming from Mexico, others coming from Havana, Cuba...from Argentina, others from Uruguay, others from the United States ... Germany were coming to Guatemala. And from this point we began to see a conflict of interest and different interpretations of what it means to be a midwife...from there came a decree that temporarily suspended the midwifery school and commissioned the University of San Carlos to combine the school together with the college of medicine, launch a new program and revise the curriculum. That is how the midwifery school died.”– Key Decision Maker, Ministry of Health*

Furthermore, plans have vacillated regarding which universities would host the midwifery program. One policy maker also admitted that there were administrative challenges in establishing health facilities where the midwifery students can conduct their clinical rotations. This is a significant problem given the important role clinical rotations play in the training process, reflecting a degree of instability that could impede success of the program.

*“I don’t know, we don’t know of a single clinical site right now. This is another process that we still have to go through, to go and assess clinical sites because we’ll have to equip them. This is the responsibility of the international agencies but managed by the Ministry of Health.”– Key Decision Maker, Ministry of Health*

## **2. Organizational Capacity**

### ***Facilitators***

Schell defined organizational capacity as “the resources needed to effectively manage the program and its activities.”<sup>82</sup> For the purposes of this chapter we consider resources in the broadest sense of the term to include human resources and infrastructure. A key human



resource that will facilitate the sustainability of the program is the presence of the Technical Commission on Midwifery within the National Reproductive Health Program. This small group- comprised of representatives from several different MOH departments - was formed in 2012 and tasked with developing professional midwifery.

*“We are a commission now. I represent the department...The midwife career falls within this department, and it’s the department’s responsibility to know, support and contribute technically. The National Program of Reproductive Health ...coordinates with the vice minister of primary care ...and other physicians who belong to the National Program of Reproductive Health.” - Key Decision Maker, Ministry of Health*

The presence of local universities willing to host the midwifery program as well as curriculum input from the San Martín de Porres from Perú midwifery school in Peru represent other human resources available and supportive of the program.

### *Impediments*

The program faces challenges in creating the curriculum given the lack of midwifery expertise in country to guide the curriculum development. The Guatemalan instructors themselves are not midwives, yet they are meant to be teaching midwifery courses in line with the ICM competencies. The fact that there are only three trained Guatemalan midwives working in country creates a human resource challenge. Only one has been consulted for input into the design of the midwifery curriculum. The responsibilities for designing the curriculum have been largely outsourced to midwives from the University of San Martín de Porres from Perú with funding from USAID.

*“We do not want teachers only for biology, only for statistics, for example, only for primary care...we need a person who can bring a global concept of midwifery.... The contents of the courses, for example, biology, have to be developed to meet the needs of a midwife...and we’re having to do that with all the courses, to adapt them with midwifery at the center of it all.” - Key Decision Maker, Ministry of Health*

Key stakeholders readily admitted that challenges in training the trainers had already occurred, preventing the program from moving forward in a timely manner.

*“The most difficult part has been the program’s administration, because the technical team still has to finalize the teacher training program in order to make a road map to train the trainers. We have to finish the training of trainers in midwifery by December.” – Key Decision Maker, Ministry of Health*

Another human resource challenge pertains to supervision of and by the midwife. As was discussed in Chapter 3, it was identified, too, that there was were inconsistent ideas among stakeholders, key decision makers included, about who would be responsible for supervising professional midwives, which could prove to be an impediment to the program’s sustainability.

*“We are very hierarchical; I think that the rotating physician is the one from the staff who should do it; he has the most experience of all the staff that are there.” – Physician*

*“It only should be team work. I don’t want to see it like supervision, because when we speak of supervision, it’s fatal. But teamwork and support would be good.” – Professional Midwife*

### 3. Program Adaptation

#### *Facilitators*

Another internal domain affecting the likelihood of sustainability of a program is program adaptation, defined as “the ability to adapt and improve in order to ensure effectiveness.”<sup>82</sup> For the purpose of this paper, given that professional midwifery does not currently exist in Guatemala, interviews were reviewed to see if key decision makers acknowledged the importance of the program meeting Guatemala’s unique needs, particularly in terms of adapting to the traditional health system preferred by Mayan women. Themes in the interviews related to program adaptation included intercultural care, women-centered care, coordination with TBAs, and characteristics of the professional midwife herself much of which was discussed in Chapter 3. Respondents in each sub-group – not only key decision makers - mentioned each of these domains, recognizing that midwifery will need to incorporate certain domains to adapt to the context domains for the program to succeed.

Intercultural care has been promoted through a social movement for indigenous rights, demanding culturally appropriate care and respect for indigenous medicine, including recognition and integration of the traditional birth attendant (TBA) in the health system.<sup>34</sup> In their interviews, key decisions makers demonstrated an awareness of the importance of intercultural maternity care in the design of the midwifery program, beginning with the admissions process. Most key decision makers also acknowledged the importance of the trained midwives practicing intercultural care in facilities, as well, in line with the Safe Motherhood law discussed in Chapter 2.

*“We want that they (the applicants) speak the same (Mayan) language, be from the community, not to be a stranger that just arrived there, to be known. We want them to be able to attend births in an intercultural way.” – Key Decision Maker, Ministry of Health*

Furthermore, the Unit of Indigenous Populations’ Health Care and Interculturality is involved with the development of the midwifery profession in Guatemala to ensure intercultural care is integrated into the program, another facilitator to adaptability.

*“In the MOH, we are like a unit specialized in indigenous affairs, to orient and give direction on how to attend to the populations that are the most vulnerable with social services from the State....Our role is to reorient health services so that indigenous people think and feel that they are the center of the attention of these services, because we are talking about rights that are inherent to all people.” - Key Decision Maker, Congress*

The Ministry of Health, through the *Acuerdo Ministerial 480 2014*, established the requisite characteristics of applicants to the midwifery school program. Within the law itself it states that applicants to the midwifery school in Huehuetenango should be indigenous women older than 18, have the equivalent of a high school diploma, originate from northern highland regions, and speak a Mayan language. It is also preferred that applicants have familiarity with culturally appropriate birthing practices and be related to a TBA. Graduates of the program are expected to offer their services preferably in their place of origin for at least three years.<sup>64</sup>

The MOH recognizes the need to build the midwifery program to strengthen coordination and collaboration between TBAs and health facilities. They envisioned the midwife bridging the gaps between the traditional and public health sectors, and, as such, bringing about more intercultural care.

*“There are clear guidelines for the CAPs that are in the standards of care and that are in the Safe Motherhood law that say that there should be safe, friendly spaces where TBAs can attend births. There should be supplies there. They should sensitize personnel in the health facility... the relationship between the TBA and the professional midwife will be a good way to close those gaps.” – Key Decision Maker, Congress*

There also appears to be recognition of the importance of shifting from a more biomedical model of care, the standard of care in health facilities today in Guatemala, to a more holistic model of care as defined by ICM for the practice of midwifery. Key decision makers revealed that they were aware of the need for this change in the health system, specifically through ensuring that the midwifery career is separate and distinct from nursing.

*“We don’t even accept auxiliary nurses into the program because we want a resource that is specifically dedicated to the attention of women. Because if the director of the health center comes...and puts her (the midwife) in another health service like vaccinations or food distribution, she is not being utilized in her fundamental role in this country.” – Key Decision Maker, Ministry of Health*

### ***Impediments***

Upon graduation from the midwifery program, a midwife is likely to encounter resistance within health facilities to practicing this type of care, regardless of the intercultural training she received at the midwifery school. Evidence shows that Mayan birth practices- while promoted and supported by law are not widely practiced or accepted throughout the health system by frontline health workers in facilities.<sup>34</sup>

*“There is a lack of intercultural care in health services ... there are situations of exclusion and discrimination in government institutions, and the Ministry of Health does not escape from this.” – Key Decision Maker, Congress*

Another impediment is the fact that TBAs have not been included in the design of the midwifery program from the outset. Additionally, key decision makers were unable to describe the plan for building the relationship between midwives and TBAs and integrating traditional medicine into the professional midwifery-training curriculum.

Furthermore, while it is encouraging from an organizational capacity standpoint that the Peruvian midwives were training the Guatemalan midwifery instructors, it was unclear that specific steps were being taken to adapt the Peruvian midwifery model to the Guatemalan context. A lack of adaptation could prove to be an impediment to the program’s success.

## **4. Program Evaluation**

Program evaluation, as defined by the Schell framework, is “the monitoring and evaluation of process and outcome data associated with program activities.”<sup>82</sup> This aspect was altogether absent in the interview, as no respondents mentioned the importance of

evaluation or any plans to measure outcomes of the midwifery program in Guatemala. This, however, may be an artifact of the interview process.

## **5. Communications**

### *Facilitators*

The last internal domain within Schell's framework is communications, defined as "the strategic dissemination of program outcomes and activities with stakeholders, decision-makers and the public."<sup>82</sup> Although plans to disseminate information about the midwifery program were not overtly discussed with respondents, interviews with all respondents revealed perceptions about midwifery. These perceptions demonstrate the degree to which accurate information about the profession has been disseminated from key decision-makers to the frontline health workers and, ultimately, the public. As discussed in Chapter 2, it is clear that the key decision makers themselves had a unified vision and an accurate understanding of midwifery.

*"The midwife [is a] a provider that has ... competencies both in obstetrics and neonatal health, and that is going to devote three years of exclusive study to this and is the perfect link between the physician and the medical services." – Key Decision Maker, Ministry of Health*

### *Impediments*

Interview with other stakeholders about professional midwifery revealed that myths and misperceptions about the profession were prolific. No participants other than key decision makers and midwives themselves were able to accurately define midwifery as a profession. This reflects significant impediments to a successful communications campaign for the program.

*"No one, no one, has any idea what professional midwifery is. I tell you this, that the (midwifery) technical committee itself does not have a midwife as a member."- Professional Midwife*

*"I believe that what is missing is to train the internal Ministry of Health like everyone outside the Ministry so that we can think together on strategies for information and communication about midwifery." – Key Decision Maker, Congress*

Given that key stakeholders in maternal health were unable to define the profession of midwifery, it is unlikely that a dissemination plan is in place to inform stakeholders and the public of program activities with stakeholders, which could prove to be an impediment to sustainability.

## **External domains**

In addition to the internal domains, we explored external domains, outside the program's locus of care that also affect sustainability (see Table 3).<sup>82</sup>

Schell's External Domains	Facilitators to Sustainability	Impediments to Sustainability
<b>Funding Stability:</b> making long-term plans based on a stable funding environment	<ul style="list-style-type: none"> <li>• Law established funding for 150 midwifery students</li> <li>• USAID and UNFPA committed funds to the training of trainer component of the program</li> </ul>	<ul style="list-style-type: none"> <li>• The language contained within <i>Acuerdo Ministerial 480 2014</i> is open to interpretation</li> <li>• No clear funding mechanisms for funding instructors long-term.</li> <li>• USAID and UNFPA funding is temporary</li> </ul>
<b>Partnerships:</b> the connection between program and community	<ul style="list-style-type: none"> <li>• Recognition of importance of midwives' partnerships with TBAs</li> </ul>	<ul style="list-style-type: none"> <li>• TBAs may perceive the professional midwife as a threat to their livelihood, causing resistance.</li> <li>• A lack of involvement community members - including TBAs - in the design of the program</li> </ul>
<b>Political Support:</b> internal and external political environment which influences program funding initiatives and acceptance	<ul style="list-style-type: none"> <li>• The presence of <i>Acuerdo Ministerial 480 2014</i> and <i>538 2013</i> protect the professional midwifery career</li> <li>• Partnerships with USAID, UNICEF, UNFPA, WHO, and the Catholic University of San Martín de Porres from Perú.</li> </ul>	<ul style="list-style-type: none"> <li>• High turnover in the Ministry of Health with regime changes</li> <li>• Low overall resource allocation to health sector in Guatemala</li> <li>• Relationships with international organizations shifts, support changes</li> </ul>
<b>Public Health Impacts:</b> the health attitudes, perceptions and behaviors in the area it serves	<ul style="list-style-type: none"> <li>• Awareness of the need for and potential impact of a midwifery program in Guatemala</li> </ul>	<ul style="list-style-type: none"> <li>• No monitoring and evaluation mechanisms established to measure the program's public health impacts</li> </ul>

**Table 3. Identified Facilitators and Impediments to Sustainability within Schell's External Domains**

## 6. Funding Stability

### *Facilitators*

The Schell framework defines funding stability as “making long-term plans based on a stable funding environment.”<sup>82</sup> The *Acuerdo Ministerial 538 2013* and *480 2014* establish professional midwifery as a career in Guatemala. These laws also commit 2,800 quetzales (approximately \$350) per month for up to 150 students. Students who receive these funds are committed to studying for 36 months, living on campus for the duration of their studies. These funds are budgeted to cover learning materials and tuition fees. The availability of these grants for the students is a milestone in the process of creating professional midwives in Guatemala. USAID and UNFPA have also committed funds to the training of trainer component of the program, another facilitator to sustainability.

### *Impediments*

However, the language contained within the *Acuerdo Ministerial 480 2014* regarding the allocation of funding is rather open to interpretation. The law states that students can be denied this funding at any time should they fail to meet their obligations, but the law does

not describe grounds for denial of the funding. The funding establishes a contract between the MOH and the student, which the MOH can rescind at any time, should they deem the student to be failing to meet her obligations. Therefore, while the funding has been earmarked for students, the MOH is under no obligation to disperse the funds, which could impede sustainability of the program.

Another obstacle will be how to sustainably find and pay instructors at the midwifery school who have hands-on experience; stakeholders themselves stated that further planning is needed in this regard. Furthermore, funding from USAID and UNFPA is temporary; there is no guarantee they will finance the training of trainers long term.

*“We have to figure out how to go about implementing this in an economical way, working with the teachers. We are already looking at this part, seeing if they (the teachers) have significant field experience...someone who is both hands-on and a midwife would begin the first year and continue for three years.”- Key Decision Maker, Ministry of Health*

## **7. Partnerships**

### ***Facilitators***

Schell considers partnerships specifically in terms of the program’s connection with the community it is intended to reach, which is an important distinction.<sup>82</sup> This domain is particularly critical for the sustainability of professional midwifery in Guatemala, as the very objective of introducing the professional midwife to the health system is to build a linkage between rural communities and the formal health sector. By its very nature, professional midwifery could facilitate the fostering of relationships between the program and the community, specifically through collaborating with TBAs. All stakeholders recognized the importance of midwives’ partnering with TBAs.

*“I believe that the two worlds have much to contribute to one another in terms of health, and her (the professional midwife’s) role is very valuable and the TBAs are too...we are working on the national TBA policy...assuring that policies are dignifying to TBAs, because no matter how many midwifery schools we have – 10 or 20- they will not be substitutes for TBAs.” - Key Decision Maker, Congress*

### ***Impediments***

However, challenges could arise due to the resistance from TBAs toward the professional midwife in the community. Because of the possible duplication of roles, TBAs may perceive the professional midwife as a threat to their livelihood.

*“We have received certain types of resistance from some TBAs. Not all TBAs are fully tuned in or in complete agreement with the training of professional midwives.” – Professional Midwife*

TBAs, community members, and health facility workers were not involved in the design of the program. In lieu of a participatory method, the key decision makers under the guidance and financial support USAID and UNFPA are following the midwifery model from Peru to inform Guatemala’s model. While the presence of this type of international support is promising for the sustainability of the midwifery program in Guatemala the lack of

participation by partners in the program design could prove to be an impediment to sustainability through hindering the development of partnerships with community members, TBAs and health facility workers.

## **8. Political Support**

### *Facilitators*

According to Schell, political support is defined as “the internal and external political environment which influences program funding initiatives and acceptance.”<sup>82</sup> The presence of laws – such as *Acuerdo Ministerial 538 2013* and *480 2014* - specifically to define and fund the professional midwifery career is a momentous facilitator to sustainability. As such the profession has been firmly established by law as a part of the public health sector in Guatemala, which will protect the profession even after political regime changes. The *Acuerdo Ministerial 480 2014* established the internal regulations for this new profession. These regulations include allowing for training of the midwives in health facilities and establishing that this profession will sit under the direction of the Vice Minister of Hospitals in coordination with the Faculty of Medicine and/or any other health sciences departments that the Ministry of Health deems appropriate.

*“As part of the commitment of the ministry to decrease maternal mortality in Guatemala, we found that an actor was missing...the professional midwife...now there is a ministerial agreement that has already been passed and is also already underway with our personnel.”- Key Decision Maker, Ministry of Health*

And, as mentioned above, a commission within the MOH has been created to support the creation of the professional midwifery career, demonstrating that there is a degree of political will behind this program. Partnerships with USAID, UNICEF, UNFPA, WHO, and the Catholic University of San Martín de Porres from Perú will also serve the program well. These partnerships greatly influence the direction a program takes, the funding it receives and the degree of acceptance the program has in the global community.

*“USAID is supporting us technically through the expertise of the Catholic University of San Martín de Porres from Perú.” - Key Decision Maker, Ministry of Health*

### *Impediments*

Impediments to political support include high turnover in the Ministry of Health with regime changes every four years as well as low resource allocation to health overall. The sustainability of the program also depends in part on the international political support it receives from global agencies and other countries. International relationships shift and support changes, which could prove challenging to the sustainability of this program.

## **9. Public Health Impact**

### *Facilitators*

It is important to consider the public health impacts this program will have on “the health attitudes, perceptions and behaviors in the area it serves,” in keeping with the Schell

framework.<sup>82</sup> It remains too early to measure any impacts of the program given that it is in its infancy. However, respondents were aware of the need Guatemala has for a midwifery program and the potential impact it could have on maternal mortality in the country. In fact, the entire program is predicated on the belief that that professional midwifery will address maternal mortality and morbidity in Guatemala. The potential outcome may be the key driver of success.

*“The Ministry is launching the school, the first school of professional midwives, that we see as a significant development, because she is a figure that can contribute primarily to maternal, infant and newborn care... Then, in their own community, women can present themselves to her and she is qualified to resolve the complications except with births that require a caesarean section.” – Key Decision Maker, Ministry of Health*

*“[Midwifery] is a commitment to international agreements to see to it that women don’t keep dying and that they don’t die from completely preventable causes.” – Key Decision Maker, Ministry of Health*

### ***Impediments***

Although multiple studies cite the impact professional midwifery can have on maternal mortality, respondents did not mention plans in place to measure the public health impact through monitoring and evaluating deployed professional midwifery graduates, as described under program evaluation.

## **Limitations**

Since the interview guides were designed with the aim to elucidate misperceptions, attitudes and expectations about the addition of midwifery to the healthcare system, the questions themselves did not specifically explore Schell’s sustainability domains. Therefore, it is possible that certain domains from Schell’s sustainability framework were not adequately captured. For example, too little is known about program evaluation, given that stakeholders were not asked about this element specifically during the interviews. Furthermore, despite 32 total interviews being carried out for the previous study, interviews with only four decision makers in the MOH and Congress and three midwives provided the majority of data for this chapter due to their level of expertise on the subject matter. Although this pool of respondents was small, they were highly influential in the design of the new midwifery program and spoke proficiently to the development and history of professional midwifery in Guatemala. Further research with more stakeholders specifically exploring Schell’s sustainability domains from the outset would bring valuable information to this program.

It is notable that the interviewed physicians, nurses, and TBAs were unable to accurately define professional midwifery, and this limited the input they could provide for this chapter. Information on the midwifery program has not been disseminated to the frontline health workers, a key finding for the communications domain of the framework. This rendered them incapable of discussing the plans for midwifery in Guatemala. Even if these stakeholders had been asked specific questions informed by Schell’s framework, it is unlikely that they would be able to provide information on most domains. This is a limitation of the



framework itself; Schell's framework appears to be limited to only interviewing stakeholders who were integral to the design of the program.

We recommend that a complementary study be conducted with another sample using a different framework such as Shediac-Rizkallah's model. Shediac-Rizkallah's model takes a different approach, considering project design and implementation factors itself as well as the broader community environment.<sup>84</sup> While there are strengths to evaluating the organizational and systemic factors influencing a program, as Schell's framework does, it is important that the community-level factors be considered as well. To further assess the likelihood of sustainability of professional midwifery in Guatemala, it is recommended to explore other sustainability frameworks in addition to Schell's that may better capture the broad range of perspectives from all stakeholders.

## **Discussion**

### **Facilitators Overall**

These results demonstrate that there are clear facilitators that will increase the likelihood for a sustainable midwifery program in Guatemala. In terms of internal domains, the level of strategic planning and the acknowledgement of the need for the program to adapt to meet the needs of indigenous women will benefit the program. While organizational capacity is a weaker area, there are still facilitators within this category that will benefit the program, such as the presence of a commission to support the program and working relationships with universities. Even in the significant problem area of communications, at least key decision makers at the national level are in agreement about the definition of midwifery and their goal for the profession.

With regard to external domains, political support revealed the greatest number of facilitators, given that there are laws and commissions in place defining and funding the profession as well as the rights of the indigenous people. Furthermore, strong relationships exist with international agencies and other countries, which demonstrates strong external political support. The funding stability domain also revealed that laws dictate that money be allocated to the training of the students through financial backing from USAID and UNFPA. Even the weaker areas of partnerships and public health impacts revealed facilitators, in the form of acknowledgment of the need to partner with TBAs and an awareness of the impact midwifery will have on maternal mortality, respectively.

Program planners should celebrate and capitalize on all the facilitators already in place, which form the backbone for the success of the program. The domains described above are critical to the program's sustainability, with each domain interrelated with the others. Strategic planning must be continued, organizational capacity bolstered, political support cultivated and relationships fostered for midwifery to succeed in Guatemala. But the presence of these facilitators is not sufficient to achieve sustainability, as the impediments described below could jeopardize the program.

## Impediments Overall and Recommendations

Despite these facilitators, our analysis revealed significant impediments. We use these impediments to inform the recommendations below (See Table 4).

**Strategic Planning Recommendations.** To address possible resistance to midwifery from specialist physicians, it is important that a professional midwifery association be formed to define, defend, and legitimize midwifery within the country. Site locations need to be finalized in all three departments according to the original plan, ideally at public universities to increase the likelihood of long-term integration into the public sector, and all 150 designated midwifery positions need to be filled with qualified student. Finally, it is critical that the clinical sites for practical rotations be finalized immediately.

**Organizational Capacity Recommendations.** The program needs to continue to look to midwives trained internationally, as they are currently doing with Peru, for guidance in the program's design, but they must be careful to modify the training to meet Guatemala's specific needs. Furthermore, the program needs to clearly establish supervisory mechanisms for and by midwives from the outset, so as to prevent organizational capacity challenges when the program is rolled out.

**Program Adaptation Recommendations.** While it is encouraging that Peruvian midwives are guiding the training process in Guatemala, it is important to review the Peruvian model of midwifery together with the entire spectrum of maternal health providers to modify the model to fit the specific needs of the Guatemalan context. The *Unit of Indigenous Populations' Health Care and Interculturality* needs to continue to collaborate with program planners and play a more central role in curriculum design. In addition, it is recommended that TBAs be included in program design through community-based efforts, ensuring that culturally appropriate birth practices are a part of the curriculum. Furthermore, all instructors for the midwifery program should commit to promoting intercultural care, and all providers at health facilities should receive standardized trainings on intercultural care.

**Program Evaluation and Public Health Impacts Recommendations.** No respondent mentioned the importance of measuring the program's progress or referred to an established evaluation system. While this could be due to the fact that respondents were not asked directly about program evaluation, it merits discussion. Since this program is in its infancy, it is critical to establish a monitoring and evaluation system to ensure impact is measured from this point forward. The program needs to conduct pre-post tests to measure midwives' knowledge, self-efficacy, and competencies before and after training. A monitoring and evaluation system with specific process indicators needs to be created to track deployed midwives' progress. The program should also work with the MOH to establish baseline national and departmental MMR and SBA and conduct follow-up survey to measure national and departmental MMR and SBA rates after the deployment of midwives.

**Communications Recommendations.** Communications as a whole appears to be a significant problem area. Given that myths and misperceptions abound among other frontline health workers (physicians, nurses, TBAs) regarding midwifery, it is important that the MOH create a communications campaign to accurately inform frontline health workers

at all levels of the health system – including TBAs - of professional midwifery, clearly describing her role in the health facility and community. This requires that these roles be established and communicated early to decrease the possibility of midwives encountering resistance when working in health facilities and the community. This campaign should also disseminate information to the public about the need for midwifery, to increase the general understanding of the national state of maternal health and the potential solutions.

Schell's Internal Factors	Recommendations for Midwifery Program
Strategic Planning: the process that defines program direction, goals and strategies	<ul style="list-style-type: none"> <li>• Form professional association for midwives</li> <li>• Finalize site locations in all three departments at public universities</li> <li>• Finalize clinical sites for clinical rotations</li> <li>• Define the role of the professional midwife in communities through community participation</li> <li>• Ensure all 150 positions are filled with qualified students</li> </ul>
Organizational Capacity: the resources needed to effectively manage the program and its activities	<ul style="list-style-type: none"> <li>• Continue to look to midwives trained in Peru – and elsewhere - for guidance in the program's design, careful to modify the training to meet Guatemala's specific needs</li> <li>• Clearly establish supervisory mechanisms for and by midwives within health system</li> <li>• Establish in-country midwifery expertise by hiring midwife instructors</li> </ul>
Program Adaptation: the ability to adapt and improve in order to ensure effectiveness	<ul style="list-style-type: none"> <li>• Build intercultural care directly into the midwifery training curriculum</li> <li>• Conduct community-based research inclusive of TBAs to inform the role of the midwife at the community level</li> <li>• Conduct standardized trainings in health facilities nationwide for providers on intercultural care</li> <li>• Review the Peruvian model of midwifery and modify to fit the Guatemalan context</li> </ul>
Program Evaluation: the monitoring and evaluation of process and outcome data associated with program activities	<ul style="list-style-type: none"> <li>• Conduct pre-post tests to measure midwives' knowledge, self-efficacy, competencies before and after training</li> <li>• Create monitoring and evaluation system with specific process indicators to track deployed midwives' progress</li> </ul>
Communications: the strategic dissemination of program outcomes and activities with stakeholders, decision-makers and the public	<ul style="list-style-type: none"> <li>• Create a dissemination plan to accurately inform all physicians, nurses, and TBAs, clearly describing her role in the health facility and community</li> <li>• Create a plan to inform all stakeholders about process of integration, challenges and successes</li> </ul>

**Table 4. Recommendations for the Midwifery Program to Address Impediments according to Schell's Internal Domains**

**Political Support Recommendations.** Even though turnover will continue within the MOH due to political regime changes, the existence of legislation supporting, protecting, and defining the profession of midwifery is critical for its sustainability. This domain is closely linked with the program evaluation and impact domains as well, in that it is critical that ongoing evaluation take place to inform one government regime to the next of the program's results. For example, the conditional cash transfer program *Progresar/Oportunidades* in Mexico has survived several changes in government due to careful measurement of the program's results throughout implementation.<sup>85</sup> Advocacy for legislation to define the

program and ensure payment for students and instructors alike needs to continue. It is time for Guatemala to increase funding in its health sector, passing legislation and implementing programs that are appropriate for Guatemala, both inclusive of the TBA and promoting skilled attendance, including professional midwives.

**Funding Stability Recommendations.** The program will need constant advocacy for funding from the Guatemalan government for the midwifery program in order to meet the needs of students and faculty alike. More specific language should be used to define the conditions that students must meet and maintain to receive the funds for their education. The midwifery program budget must be reviewed to ensure that instructors’ salaries are included. It is critical that the MOH foster relationships with international agencies involved in the midwifery program by including them in trainings and creating fora to share lessons learned.

**Partnerships Recommendations.** Partnerships are another problematic domain, as our study revealed an alarming lack of partnerships between the program itself and the communities where the midwives are intended to work. Thus, it is of utmost importance that key community leaders, especially TBAs, be involved in the design of the professional midwifery program, together defining her role in the health facility and community. Given that the training of midwives is in its beginning stages, there is still sufficient time to involve stakeholders at all levels of the health system in the program’s strategy. Specifically, for the midwife to effectively reduce maternal mortality by improving the linkage between health facilities and the community, a referral network between TBAs and health facilities facilitated by the midwife needs to be established. This referral system will only be successful if all participants are involved and invested in its design.

External Factors	Recommendations for the Midwifery Program
<b>Funding Stability:</b> making long-term plans based on a stable funding environment	<ul style="list-style-type: none"> <li>• Lobby for more specific language to define the conditions students must meet and maintain to receive funds</li> <li>• Advocate for increased funding for the program, including instructors’ salaries</li> <li>• Maintain relationships with international agencies by including them in trainings and creating fora to share lessons learned</li> </ul>
<b>Partnerships:</b> the connection between program and community	<ul style="list-style-type: none"> <li>• Involve community members - including TBAs - in the design of the professional midwifery program, defining her role in the community together</li> <li>• Establish a network for referral between TBAs and health facilities facilitated by the midwife</li> </ul>
<b>Political Support:</b> internal and external political environment which influences program funding initiatives and acceptance	<ul style="list-style-type: none"> <li>• Continue to pass legislation to support, define and protect the profession of midwifery in Guatemala</li> <li>• Advocate for increased spending on health overall</li> </ul>
<b>Public Health Impacts:</b> the health attitudes, perceptions and behaviors in the area it serves	<ul style="list-style-type: none"> <li>• Work with MOH to establish baseline national and departmental MMR and SBA and conduct follow-up survey to measure changes in MMR and SBA nationally and by department after deployment of midwives</li> </ul>

**Table 5. Recommendations for the Midwifery Program to Address Impediments according to Schell’s External Domains**

## **Program Updates**

It is important to note that, at the time of writing of this chapter in 2016, plans for the midwifery school had already changed since data was collected in 2014. The total number of training sites reduced from three to one. The program is in the process of only opening in Huehuetenango. The other two departments, Quiché and Alta Verapaz, have been postponed indefinitely due to challenges with host universities. The host university for Huehuetenango changed altogether three times, shifting from a public university to a private university though the program remains public.

Key decision makers reported that although legislation has created spaces for one hundred fifty students, the actual number of students decreased to fifty for the inaugural class. At the time of writing, even those 50 student vacancies had not been filled, instructors were still in the process of being trained, the curriculum had not been finalized, and the official opening of the school had been postponed due to political unrest. These changes in the short period of time between data collection and the writing of this chapter demonstrate the vulnerability of this program and the threats it faces to sustainability. Our findings together with the current status of the program underline the importance of identifying and addressing impediments to the midwifery program.

## **Conclusion**

With the launch of the new midwifery school, now is an important time for maternal health in Guatemala. Professional midwifery has the potential to provide long overdue life-saving services to indigenous women who have historically lacked access to skilled attendance. Given Guatemala's history of failed midwifery programs, it is imperative to assess the existing impediments to sustainability of the newly launched program. Using Schell's framework, our study revealed the presence of facilitators that give the program the capacity for sustainability, especially within the political support, strategic planning, and program adaptation domains. There were also promising facilitators within the organizational capacity and funding stability domains. Yet the study also revealed the program's weak partnerships and poor communications that pose significant impediments to the program's sustainability. At the launch of this important program, it is critical to identify and address potential challenges in order to sustainably provide midwifery services to the rural, indigenous women of Guatemala.

## Chapter 5. Conclusion

Professional midwifery has the potential to significantly improve maternal and newborn health in Guatemala, particularly among the indigenous Mayan population who has suffered disproportionately in terms of health outcomes. Given that professional midwifery is currently being reintroduced in Guatemala for the first time in over fifty years, formative research is needed to increase the likelihood of the program's success, rendering this dissertation timely. The goal of this dissertation is to consider historical challenges to successful maternal health policies, explore current perspectives on professional midwifery and provide recommendations for sustainable professional midwifery in the future. Findings from all three papers can and should be used in concert to inform the design and successful implementation of the midwifery program in Guatemala.

The **first dissertation paper** uses Meier's Linear Model of the Public Policy Process, demonstrating that since 1996, state-centered forces in Guatemala have aligned with international forces, advocating for SBA and excluding TBAs as a key strategy to address maternal mortality. However, in the same post-war period, society-centered forces in the form of the intercultural care movement arose contradicting the call for SBA and instead defending the role of TBAs in maternal health care. Both forces – the international push for SBA and the society-centered force promoting TBAs as a part of intercultural care - influenced policy makers to create contradictory maternal health policies regarding TBAs. We hypothesize that these tensions hindered the development of appropriate, successful strategies to address maternal mortality in indigenous Mayan communities.

This review is important since the reintroduction of professional midwifery to the health system represents a unique opportunity for policy makers to actually respond to both forces. Now is the time for policy makers to carefully consider the specific role the professional midwife will play in order to both increase SBA and improve intercultural care for Mayan women in Guatemala. Both society-centered and international perspectives must inform the design of the midwifery program in Guatemala if it is to succeed.

The **second dissertation paper** explores this range of perspectives by intentionally interviewing the full spectrum of maternal health care providers, from the community to the national level. Our findings elucidate current stakeholders' levels of receptivity, perceptions and attitudes toward the introduction of professional midwifery to the Guatemalan healthcare system. Politicians and key decision makers defined the National Vision, and we made relative comparisons were made among themes within and across disciplinary subgroups of participants in order to illuminate facilitators and threats to the success of midwifery.

Our study found that physicians, nurses and TBAs were unable to define or describe professional midwifery as a distinct profession. All subgroups of respondents expressed their own personal acceptance towards the midwife, but they also anticipated resistance toward professional midwifery by others. Expectations among most stakeholders were aligned regarding the role of the midwife in the health facility, the need for her to coordinate with TBAs, and with intercultural care. However, there were notable differences in expectations

toward supervision of and by the midwife, the specific roles of the midwife in the community, and the nature of the midwife's relationship with TBAs.

This paper identified the following facilitators to the success of midwifery: overall general acceptance of the midwife as a legitimate professional actor, political will at the national level, uniformity of vision among stakeholders, and the potential for improved intercultural care and cooperative relations with TBAs. This study revealed that there is no clear road map detailing how midwifery will be integrated into the health system or how she will be incorporated into the community and coordinate care with TBAs. This road map is critical to the success of the midwifery program and needs to be developed.

The **third dissertation paper** reviewed policy documents from the first paper and interviews with key stakeholders from the second in order to begin outlining the roadmap called for in paper two. Based on Schell's Sustainability Framework, this study revealed the presence of facilitators to sustainability within the political support, strategic planning, and program adaptation, organizational capacity and funding stability domains. Yet the study also revealed that the program has weak partnerships and poor communications strategies that pose significant impediments to the program's sustainability. Respondents failed to identify a program evaluation strategy, which could render it impossible to measure midwifery's public health impact. The omission of this information may be a construct of the interview process, but it merits further consideration. In light of all the identified impediments, we present key recommendations for the designers of the midwifery program in order to improve the program's likelihood of success.

These three studies resulted in deep, rich findings specific to Guatemala. This approach – considering the past, present and future of professional midwifery in tandem- is the first of its kind in Guatemala and sheds light on an area where virtually nothing is known. The cross-section of stakeholders interviewed provided a breadth of perspectives from people who are instrumental to the ultimate success of this strategy. And the in-depth interviews allowed for a profound understanding of individual perspectives. The policy review in the first paper lent historical perspective to maternal health in Guatemala, paper two considers the health system today, and paper three looks forward to the future. Taken together, this dissertation highlights several directions for future research and generated context-specific recommendations to address the needs of Mayan communities.

This dissertation also underlines important implications for public health practice. At the launch of this important midwifery program, it is critical to identify and address potential challenges that midwifery may face in its implementation. Program planners should consider this formative research and subsequent recommendations to inform program design for midwifery in order to sustainably provide needed obstetric services. Midwifery could ultimately increase the number of skilled births in the region, strengthen the health system, improve relationships with TBAs and intercultural care, and decrease maternal mortality and morbidity among rural, indigenous women in Guatemala. The findings and recommendations in this dissertation could be used to improve maternal health services both within Guatemala and beyond.

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