# FINAL REPORT
# Viet Nam Midwifery Report 2016

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# ACKNOWLEDGEMENTS

The Ministry of Health, with technical and financial support from the United Nations Population Fund, has developed the first ever Viet Nam Midwifery Report 2016 which reviews the current needs, availability, accessibility, acceptability, quality and regulatory framework of midwifery services and practices in Viet Nam, with a vision towards 2030. The report also provides recommendations for midwifery practices in the coming years, including for governance, human resources, financing, service delivery, health information and infrastructure, equipment, and pharmaceuticals.

We would like to thank Dr. Sarah Bales and Prof. Sue Kildea for their dedication and enthusiasm to complete the report. We also sincerely thank Dr. Phan Le Thu Hang, Deputy Director of the Planning and Finance Department of the Ministry of Health, for her endless coordination efforts during the entire process of the report preparation. We would like to thank Dr. Duong Van Dat and Dr. Le Thi Thanh Huyen of UNFPA Vietnam for their valuable technical guidance throughout the preparation and publication of this report.

It is our hope that this report proves useful to policy makers, programme managers, health professionals, researchers and donors in designing and implementing effective reproductive health programmes in order to achieve the ultimate objectives of the International Conference on Population and Development and the Sustainable Development Goals in Viet Nam.

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*The views expressed in this report are those of the authors and do not necessarily reflect the policies of any organizations.*

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# ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ANC | Antenatal care |
| AIDS | Autoimmune deficiency syndrome |
| ARV | Antiretroviral (drugs or therapy) |
| ASD | Autism spectrum disorders |
| ASEAN | Association of Southeast Asian Nations |
| ASTT | Administration of Science, Technology and Training (MOH) |
| BCC | Behaviour change communication |
| CHS | Commune health station |
| CME | Continuing medical education |
| C-section | Caesarean section |
| D&C | Dilation and curettage |
| DHS | Demographic and Health Survey |
| DPF | Department of Planning and Finance (MOH) |
| DOP | Department of Organization and Personnel (MOH) |
| ER | Emergency room |
| EmONC | Emergency obstetric and newborn care |
| EU | European Union |
| FTE | Full-time equivalent |
| GP | General practitioner |
| GOPFP | General Office of Population and Family Planning (MOH) |
| GSO | General Statistics Office |
| GYN | Gynaecological |
| HIV | Human immunodeficiency virus |
| ICM | International Confederation of Midwives |
| IEC | Information, education and communication |
| MCH | Maternal and child health |
| MCHD | Maternal and Child Health Department (MOH) |
| MDG | Millennium Development Goal |
| MICS | Multi-Indicator Cluster Survey |
| MOET | Ministry of Education and Training |
| MOH | Ministry of Health |
| MOHA | Ministry of Home Affairs |
| MOLISA | Ministry of Labour, Invalids and Social Affairs |
| MRA | Midwifery Regulatory Authority |
| MSA | Medical Services Administration (MOH) |
| NGO | Non-governmental organization |
| NICU | Neonatal intensive care unit |
| NTP | National Target Program |
| OB | Obstetric |
| PEPFAR | President's Emergency Plan for Aids Relief |
| PHC | Primary health care |
| PMTCT | Prevention of mother-to-child transmission (of HIV) |
| RDS | Respiratory distress syndrome |
| RH | Reproductive health |
| RTI | Reproductive tract infection |
| SBA | Skilled birth attendant |
| SCF | Save the Children Fund |
| SDG | Sustainable Development Goal |
| SoWMy | State of the World's Midwifery report |
| SRMNH | Sexual, reproductive, maternal and newborn health |
| STI | Sexually transmitted infection |
| TAR | Total abortion rate |
| TFR | Total fertility rate |
| TOT | Training of trainers |
| UNFPA | United Nations Population Fund |
| USD | United States Dollar |
| VAM | Viet Nam Association of Midwives |
| VBA | Village birth attendant |
| VHW | Village health worker |
| VBAC | Vaginal birth after C-section |
| VHLSS | Viet Nam Household Living Standards Survey |
| VMR | Viet Nam Midwifery Report (abbreviation for this report) |
| VND | Vietnam Dong (currency) |
| VTC | Voluntary counselling and testing |
| WHO | World Health Organization |
| WRA | Women in reproductive age |
| WPRO | Western Pacific Regional Office (WHO) |

# EXECUTIVE SUMMARY

The ***Viet Nam Midwifery Report 2016*** is the first national midwifery report produced for Viet Nam. It reviews recent trends and the current situation of midwifery in Viet Nam to help the Ministry of Health (MOH) develop a vision to 2030 to achieve the Sustainable Development Goals (SDGs) on safe motherhood and newborn care. The report also contributes to implementation of the current national reproductive health strategy while providing information for development of the next strategy.

## Country context

Viet Nam is a lower middle-income country with a population of 91.5 million people, 26% of whom are women of reproductive age (WRA) (from 15-49). Nationally, fertility has fallen to replacement levels, and the country has succeeded in rapidly reducing maternal, neonatal, infant and child mortality rates. Yet, disparities persist across regions and socio-economic groups, particularly between ethnic minorities and the Kinh population.

Viet Nam's government health services network covers the entire country with village health workers (VHWs), commune health stations, polyclinics, and hospitals at the district to central levels. Other government providers exist for specific services like family planning and human immunodeficiency virus/autoimmune deficiency syndrome (HIV/AIDS) control. Private clinics, non-government settings, and hospitals are growing in importance. Some remote regions remain isolated, with lower access to these health services.

Reproductive health policy is subject to general health sector laws, strategies and plans, as well as detailed population, reproductive health,

safe motherhood, child survival, nursing and midwifery strengthening strategies and action plans. However, several key reproductive health documents fail to emphasize the key role of midwives in achieving maternal and newborn health goals.

## Methodology

This report was written following the structure and methodologies used in the *State of the World's Midwifery* (SoWMy) report 2014 and related tools. A key feature is the Midwifery 2030 Pathway to Health framework, which contributes to developing a vision for Midwifery 2030 in Viet Nam. The authors of this report relied primarily on review and analysis of secondary sources, supplemented by a survey of training establishments and in-depth interviews of key stakeholders. The report was refined and strengthened through feedback from stakeholders.

## Findings

### *Need*

The need for midwifery care can be estimated based on core demographic indicators such as the proportion of WRA and norms about midwifery service needs during four stages outlined in the Midwifery 2030 Pathway to Health. For Viet Nam, these indicators were estimated as shown in the following table, with lower estimates from General Statistics Office (GSO) survey data and higher estimates from Maternal and Child Health Department (MCHD) reporting.

Pre-pregnancy needs for midwifery care include family planning (FP) counselling and service delivery, and sexually transmitted infection (STI)/HIV control. All women (and men) in reproductive age, including those who are married and unmarried, have need for these services. Midwives are only one of the providers offering reproductive tract infection (RTI)/STI

| Need | Midwifery services |
|---|---|
| Pre-pregnancy (all WRA) | 24 million family planning visits |
| Antenatal (pregnancies X 4 visits) | 8.4 to 9.2 million routine visits |
| Birth | 1.4 to 1.7 million births requiring a skilled birth attendant |
| Postpartum (births X 4 visits) | 5.6 to 6.8 million routine visits |

services and FP counselling, but they play a key role in providing clinical contraception at the grassroots level.

In 2015, it is estimated that there were between 2 and 2.3 million pregnancies in Viet Nam. Midwifery need is focused on providing essential antenatal care services for monitoring and managing pregnancy and detecting and resolving any complications that may arise. While antenatal care is a core competency of midwives, currently in Viet Nam medical doctors are the main providers. Some pregnancies are lost to miscarriage or are terminated through abortion each year, with midwives often involved, but the services mainly are provided by doctors.

In 2015, 1.4 to 1.7 million births occurred in Viet Nam. Care during normal birth is another core area of midwife competency and includes monitoring labour, continuous comforting and coaching, and active management of the third stage of labour. Detection and resolution of various obstetric (OB) complications is another set of essential midwifery needs. In Viet Nam, most births occur in hospitals assisted by doctors, rather than by midwives in primary care settings.

Postpartum preventive care for all mothers and newborns includes routine services like vaccinations and breastfeeding support immediately after birth, monitoring, and advising the mother and family about possible complications in the mother or newborn during the postpartum period. These needs also include interventions when something goes wrong, such as for preterm, low birth weight newborns or mothers facing OB complications such as postpartum haemorrhage or depression.

### *Availability*

**Midwives are almost universally available** at commune health stations and at all hospitals in Viet Nam to provide midwifery services. Many other professionals also provide midwifery services including specialists, general practitioners and nurses. As of 2013, 94% of the midwives in Viet Nam had training at secondary level (i.e. 2 years of midwifery training) and below. Basic medicines and equipment for midwifery services are unevenly available at the grassroots level.

By 2016, 40 schools offered some form of midwifery training, with six offering university level (4 years), 21 offering junior college (3 years), and 27 offering secondary-level programs. The reported actual and planned enrolments in upgrade training (from 2-year to 3-year midwife) remain low. Training establishments in Viet Nam can only meet a small share of the need for upgrading qualifications for 33,000 midwives by 2025 as required in Circular 26/2015/TTLT-BYT-BNV, which mandates a minimum qualification of 3 years of training to register as a midwife starting in 2025.

Many basic midwifery services are widely and increasingly available at the grassroots level, particularly OB ultrasound and cervical screening at commune health stations, and treatment of neonatal jaundice and care of low birth weight infants at the district level. Nevertheless, availability of basic essential emergency OB services at commune health stations remains limited. Circular 26 imposes narrow regulatory limits to the scope of work of Level IV midwives (those trained at secondary and junior college level) compared to their actual job requirements in areas such as clinical contraception, RTI/STI services and early abortion.

### *Accessibility*

Access to midwifery services has grown, but gaps remain. The overall unmet need for family

planning in Viet Nam increased between 2011 and 2014, while disparities persist with higher unmet needs for family planning among ethnic minorities and among adolescents and youth. Kinh majority women now have nearly universal antenatal care and trained assistance at delivery, although some basic elements of this care are missing, such as early screening for HIV to assess the need for prevention of mother-to-child transmission (PMTCT) services. Only two-thirds of ethnic minority women accessed antenatal care and assisted delivery services, with an even smaller share receiving all essential components of care.

Distance remains an important barrier to accessing emergency OB services in regions of Viet Nam with high ethnic minority populations. Stigma and judgemental health worker attitudes adversely affect access to contraception, STI/HIV and abortion services.

Also, financial incentives and health insurance are strongly influencing the mix of services used and provided in the health system. In areas where health insurance does not cover primary care birthing services, women are pushed into overcrowded hospitals. Higher remuneration for more interventions under fee-for-service payments induces overprovision of services. Ambiguity regarding who is responsible to pay for what often leads to patients bearing higher out-of-pocket payments.

The focus on expanding services has led to failure to establish measures that ensure evidence-based practice to prevent harmful and costly overprovision of services. Three services where Viet Nam's provision exceeds international recommendations include OB ultrasound, episiotomy and Caesarean section (C-section). Evidence of the potentially harmful effects of each of these is presented in this report.

### *Acceptability*

Respectful care that enhances the human rights of women using midwifery services and improves outcomes remains weak in some aspects of care provision. For example, there is limited emphasis in training on or practice of comfort for women in childbirth through choice of birth companion or birthing position, both of which also enhance maternal and child outcomes. Lack of information and choice about interventions during birth, such as episiotomy, is another weak area.

High unmet need for contraception and STI services reflects low availability of youth-friendly services. Low use of antenatal care and assistance at birth reflects not only geographic distance, but also lack of cultural sensitivity among service providers and inadequate health education among ethnic minority women and their families, with culturally sensitive trained village birth attendants (VBAs) only meeting about 20% of the need.

### *Quality*

A strong evidence base supports the significant contribution midwife-led care can make to quality maternity and newborn care if service providers are adequately qualified and regulated, and organized in a continuity model of midwife care with resources and support in cases of complications. Benefits of this model of care include fewer interventions, fewer complications and lower cost.

Vietnamese midwives are trained in a network of secondary, junior college and university facilities. Competency-based curricula were introduced for junior colleges in 2010 and universities in 2015, moving Viet Nam closer to meeting International Confederation of Midwives (ICM) standards for pre-service curricula. VBAs receive

competency-based training focused on basic essential midwifery services needed in the areas they serve. Some problems exist in the quality of training, including a shortage of midwives serving as instructors, low skills of instructors offering training on use of new pedagogical techniques, low proportions of VBAs achieving competency during training, and slow updates in training materials compared to expansion of medical knowledge.

A large number of continuing medical education training courses have been offered to midwives and other midwifery workers in Viet Nam. New regulations require 48 hours of continuing medical education every two years to maintain a midwife registration. Yet mechanisms for enforcement, for accrediting content, and for strategically planning continuing medical education training remain weak.

The Viet Nam Association of Midwives (VAM) was set up in 1995, and has been involved in policymaking and advocacy for continuing medical education and midwifery. However, its role remains weak, with few policy documents receiving feedback from the Association, and lack of accreditation for the Association to directly provide continuing medical education courses.

Viet Nam has developed a large number of clinical guidelines related to midwifery services since 2007. However, fieldwork revealed that many hospital staff are unaware of these guidelines. While there may be some introduction of new guidelines to the provincial health departments, it appears that the new guidelines are not reaching the clinical facilities and that there are inadequate mechanisms in place to ensure compliance.

### *Regulatory framework*

Regulation of midwifery involves a complex network of departments and administrations within the MOH, and several other ministries including the Ministry of Education and Training (MOET), the Ministry of Labour, Invalids and Social Affairs (MOLISA), and the Ministry of Home Affairs (MOHA). Viet Nam's legal framework surrounding midwifery has been set up rapidly over the past few years, particularly the issuing of Circular 26, competency/skill standards, and curriculum reform. However, midwives have played only a minimal role in development of relevant regulations, so their perspectives are not adequately reflected.

Conflicts in existing policy include an unnecessarily restrictive scope for midwife practice, an infeasible roadmap for upgrading qualifications, and a lack of midwife-specific regulations for professional registration, code of conduct, and complaints procedures.

## Conclusions

The midwifery situation in Viet Nam deviates substantially from the vision of the Midwifery 2030 Pathway to Health. Substantial unmet need for pre-pregnancy, pregnancy, birthing and postpartum/postnatal services remain, including disparities in access to services as mentioned above. The current model of service provision in Viet Nam also deviates from the Midwifery 2030 model, as it relies heavily on hospital-based, doctor-led services, which are both scarce and costly, and also lead to harmful overprovision of unnecessary interventions compared to midwife-led care.

Examination of the six building blocks of the health system in Viet Nam reveals some major challenges requiring action over the next few years. These include the following key areas:

**Governance:** Limited involvement of midwives in setting policies, guidelines, and regulations, and lack of midwife-specific professional regulations, such as for establishment of a Midwifery Council; excessive restrictions in Circular 26 on the scope of midwifery practice for those with less than junior college (3

year) education and an infeasible timeline for upgrading qualifications of midwives to junior college or higher; weak enforcement of clinical guidelines.

**The health information system:** An adequate midwife workforce and a lack of training statistics for human resources planning; little routine information on VBA performance and the need for VBAs; insufficient monitoring of training quality; insufficient attention to mechanisms for gathering and using actionable information (e.g., maternal mortality audits); insufficient information on some important midwifery service needs and health service responses; lack of information on private sector midwifery service provision or workforce.

**Health human resources:** Low VBA coverage in areas of need; inadequate scope of Level IV midwife service provision to meet the need; inadequate efforts to match the demand for midwives in health facilities with the supply from training establishments; fragmented and inadequately coordinated management of midwifery training across three ministries; devolved provision of junior college midwifery training covering less than one-third of provinces; low capacity to provide junior college or university pre-service or upgrade midwifery training; constraints on quality of midwifery training due to insufficient midwives as instructors and difficulties in arranging clinical practice; continuing medical education not yet coordinated with issuance of new guidelines; inadequate focus on midwife skill upgrading.

**Health financing:** Health service prices and insurance incentives that lead to underutilization and under provision of some essential midwifery services and overprovision of others; high financial burdens of transport costs in remote areas and costs of over servicing in other areas; lack of a financial strategy to support the retraining/continuing medical education training for midwives.

**Pharmaceuticals and equipment:** Lack of a system to verify availability of essential drugs and equipment and to provide support to ensure gaps are filled, particularly at commune health stations.

**Health service delivery:** Existing models inadequately meet the needs for pre-pregnancy care of unmarried adolescents and youth, while reduction in national target program funding has not yet been replaced by alternative sources; the current medical model of maternity care services, focused on hospital-based, doctor-led care, is unsustainable and leading to adverse effects on quality due to excessive interventions; private sector midwifery service provision is scarce, leading to lack of competition to push public services to improve their quality.

## Recommendations

### *Goals for Viet Nam*

- Decline in maternal and neonatal mortality to meet the relevant SDGs.
- Positive, safe and effective pre-pregnancy, pregnancy, birth and postnatal/neonatal experiences for mothers and families, including ethnic minority women, and services that meet reproductive health needs of adolescents and youth.

### *Building blocks*

- **Governance:** Enhance midwife-specific regulatory authority; urgently revise the Circular 26 scope of responsibility for Level IV midwives, and the timeline and alternative options for upgrade training; as training improves, expand the scope of midwife practice to meet the needs outlined in the Midwifery 2030 vision for autonomous midwife practice.
- **The health information system:**

## MIDWIFERY 2030 VISION

| | NEEDS |
|---|---|
| **Midwives meet 85% of basic essential midwifery service needs, referring women to doctors only when there are complications.** | • **Pre-pregnancy**<br>• **Pregnancy**<br>• **Birth**<br>• **Post-partum**<br>• **Neonatal care**<br>• **Other reproductive health needs** |
| **Doctors meet the needs in cases involving complications, and are rarely involved in basic midwifery service provision.** | |

Exploit existing workforce statistics from professional registry data; consolidate information centrally on midwife training to aide in efforts to match demand and supply; increase effectiveness of data collection and analysis for taking action on issues such as maternal and neonatal mortality and over servicing; fill gaps in information about health service needs and private sector.

- **Human resources:** Improve efforts at job placement for newly graduated, highly qualified midwives; rapidly expand, invest in, and supervise (to ensure quality) midwife training at junior college and higher level; halt secondary level midwife training and shift resources to junior college and upgrade training; strengthen coordination and enforcement of continuing medical education.
- **Health financing:** Reform incentives by revising health service fees to reflect the full range of midwife services; ensure clarity in the cost of items for services, charging bundled prices, and clarifying the sources of funding (e.g., from donors, health insurance, national target programs) to reduce the burden of out-of-pocket spending by needy families; ensure regulations are in place to ensure financial resources for upgrade training and continuing medical education, whether from trainee tuition payments, employer payments, or other sources.
- **Pharmaceuticals, equipment and infrastructure:** Ensure availability of essential midwifery drugs at the grassroots level, especially emergency OB drugs in facilities that assist at births; ensure adequate sets of antenatal care and birthing equipment in facilities providing these services; develop protocols and options for rapid tests and test strips for STI screening and protein in urine testing to reduce costs and increase availability; invest in adequate sets of simulation equipment for pre-service, upgrade, and continuing medical education training at training facilities and clinical practice facilities.

- **Service delivery:** Maintain and extend the network of youth-friendly services; gradually introduce the midwife-led maternity care service model as human resources and other conditions permit; provide facility accreditation of private and public primary-level birthing facilities with care led by midwives; study the potential for adopting the mother-baby friendly birthing facilities strategy; implement communication strategies and other strategies to increase confidence of families in primary-level birthing facilities; strengthen efforts to introduce and support VBAs working in remote ethnic minority areas; increase information gathering and enforcement measures to enforce compliance with national reproductive health services guidelines and reduce overservicing.

# CHAPTER 1
# Country Context

The objective of this report is to review recent trends and the current status of midwifery in Viet Nam in order to help the Ministry of Health (MOH) have a comprehensive picture of the situation of midwifery in Viet Nam and thus develop a 2030 vision for Viet Nam to achieve the Sustainable Development Goals (SDGs) related to health and reproductive health. Among the SDG indicators related to reproductive health are those related to safe motherhood, newborn care, and some aspects of universal reproductive health care, which can all be achieved through strengthening midwifery services. This report also aims to contribute to implementation of the Viet Nam Strategy for Population and Reproductive Health 2011-2020 and development of the future strategy for the period 2021-2030. This chapter provides the country context.

## 1.1. General information

### *Demographics*

Viet Nam's population in 2015 reached 91.5 million people, of which 24 million (26%) were women of reproductive age. [1]. The population is projected to continue growing by 12% to about 102.9 million people by 2030, of which 25 million (25%) will be women of reproductive age (WRA) [2]. About 33.7% of the population lives in urban areas (Table 1), and this share is projected to grow to 40% by 2030.

Viet Nam is a multi-ethnic society, which is ethnolinguistically and culturally complex. Ethnic minority groups make up over half the population in the Northern Midlands and Mountains and more than one-third of the population in the Central Highlands, two regions with complicated geography and health facilities that are often difficult to access. Within a given commune, many different ethnic groups may reside, which creates an important challenge to health service providers to ensure that their staff are sensitive to traditional health care practices and preferences.

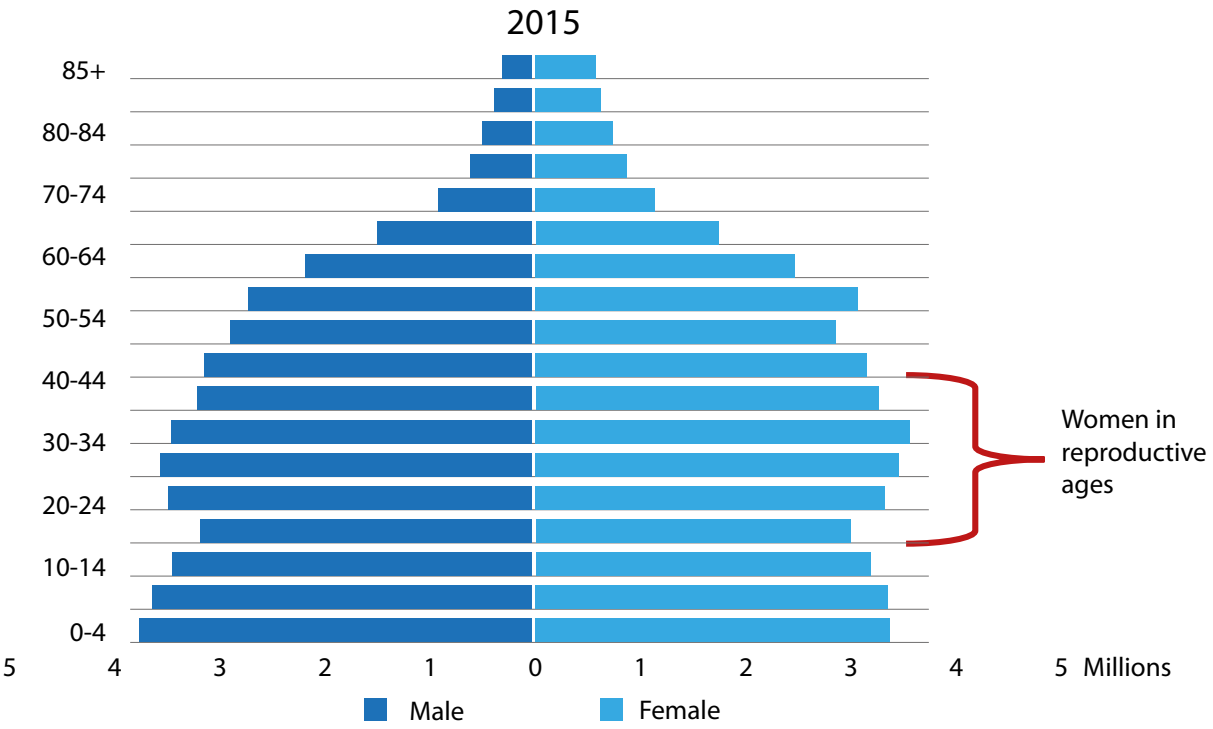
## Table 1: Demographic characteristics by region, 2015

| | Population (million) | Urban (%) | Ethnic minority (%, 2009) | Completed secondary school and higher among population aged 15+ (%) |
|---|---|---|---|---|
| National | **91.5** | **33.7** | **14.3** | **30.3** |
| Northern Midlands and Mountains | **11.8** | **18.1** | **54.7** | **27.6** |
| Red River Delta | **20.9** | **33.9** | **1.5** | **41.0** |
| North and South Central Coast | **19.6** | **28.2** | **9.6** | **29.2** |
| Central Highlands | **5.6** | **29.0** | **35.3** | **23.0** |
| Southeast | **16.0** | **63.0** | **6.5** | **37.0** |
| Mekong River Delta | **17.6** | **25.0** | **8.0** | **15.7** |

*Source: GSO. Survey of Population Change and Family Planning. 2015; Central Population and Housing Census Steering Committee. Ethnic minority share from 2009 Viet Nam Population and Housing census: Completed Results, Part 1: Table 5. Hanoi, June 2010.*

Viet Nam's population pyramid for 2015 shows that WRA account for more than 50% of all women (Figure 1). It also shows that the reduced total fertility rate (TFR) has stabilized the population, with a relatively constant number of births each year. The uneven sex ratio at birth can also be seen from Figure 1, with a considerably larger group of boys than girls up to the 20-24 year age group.

**Figure 1: Viet Nam population pyramid, 2015**




*Source: Drawn from data in Table 2, p. 138. GSO Survey of Population Change and Family Planning 1/4/2015 [1].*

### *Socioeconomic situation*

Gross domestic product (GDP) per capita in 2015 reached 45.7 million VND, or about 2,109 USD. Real GDP growth reached 6.7% in 2015. Poverty rates have fallen from 14.2% in 2010 to 7% in 2015. Urban poverty rates are lower at 2.5% compared to rural areas at 9.2%. The poorest regions are the Northern Midlands and Mountains (16% poverty rate) and the Central Highlands (11.3%) [3]. Nearly 6 million people are living in a district, province, or region that is different from where they lived five years ago. Migrants are concentrated largely in the age groups 20 to 29 [1].

### *General health system*

Viet Nam's health system is a mixed system, with a widespread established network of government health facilities from central to commune levels in almost all localities, while a growing private sector providing mostly outpatient services, and some private hospitals in major cities. Preventive services are provided through a large number of agencies at all levels, although the service delivery is often at commune health stations. The government has recently invested heavily in the district hospitals to enlarge and equip them so that they can provide a wider range of services. The aim is to strengthen these settings as the first referral level.

Health system financing in Viet Nam involves a mix of government supply-side subsidies to public providers, social health insurance, and out-of-pocket payments. Social health insurance coverage in 2015 reached 70.95 million people, equivalent to 77% of the population [4]. The government provides demand-side subsidies in the form of payment for social health insurance premiums for vulnerable population groups such as the poor, elderly, and children under age six.

Pharmaceutical quality and prices are managed by the Drug Administration of Viet Nam, which has invested heavily in drug quality control, and a competitive tendering policy for state hospital procurement of pharmaceuticals. Efforts have been less effective in ensuring access to essential drugs and rational and safe use of drugs, particularly antibiotics.

### *Health information system*

Health information is gathered mainly through surveys and a routine reporting system. Several relevant household sample surveys are implemented on a regular basis providing valuable information on demographic indicators[1] and maternal and child health indicators.[2] These surveys are nationally representative and considered to be of good quality. Occasionally the MOH will run a survey/inventory of facilities to gather information about health human resources, medical equipment and infrastructure, and service delivery.[3] The Medical Services Administration (MSA) of the MOH has a database on professional registration of all health workers including midwives, which could be a good, regularly updated, source of information on the actual number of practicing health workers, including midwives, in future years. The routine reporting system of the maternal and child health network complements survey data, with information reported annually by facilities or localities to the Maternal and Child Health Department (MCHD) following a set of standard reporting forms.5 Other special purpose data gathering is performed occasionally, such as the maternal and neonatal mortality audits, to examine the underlying risk factors and causes of death. The vital records system is run by the Ministry of Justice and remains incomplete due to delays in birth and death reporting, although with the new citizen ID numbers being issued, and public administrative reforms prioritizing this system, some improvements are expected. Despite the many components of the current health information system, there are still gaps and inconsistencies. These will be mentioned as they come up in the analysis below.

## 1.2. Midwifery-related health issues

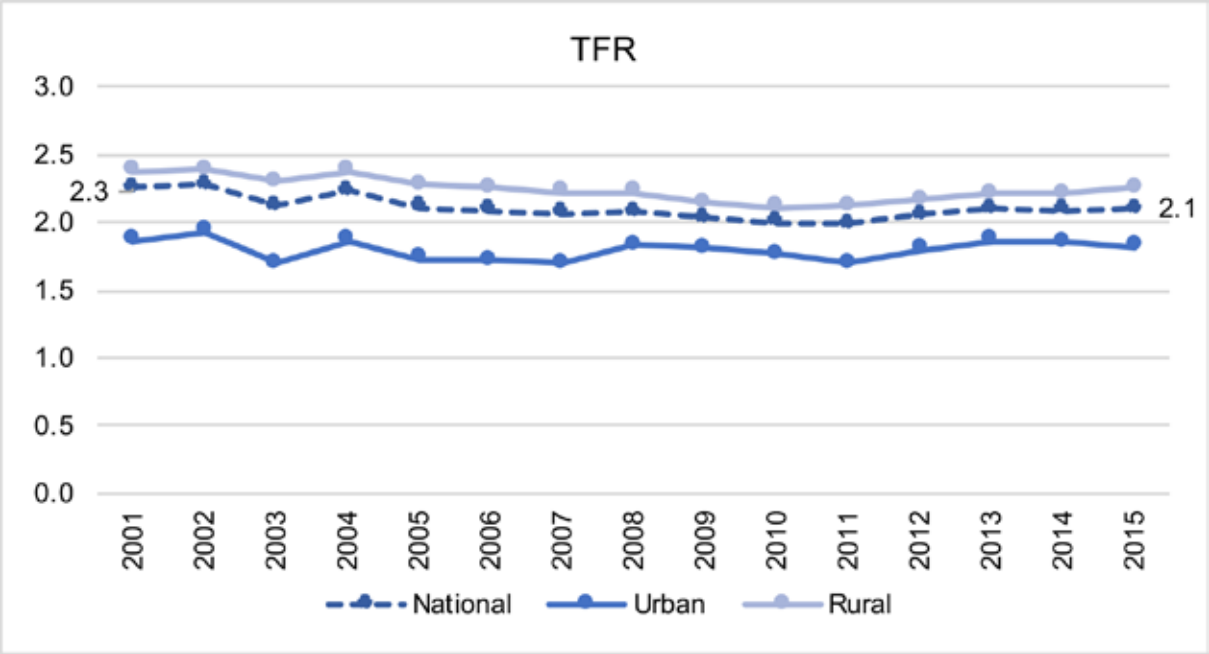
**Fertility in Viet Nam has reached and remained at low levels in both urban and rural areas.** Viet Nam's strong family planning efforts have achieved rapid declines in the total fertility rate (TFR), from a high of 3.8 in 1989 to 2.3 by 2001, followed by further slight declines to the current stable replacement level (Figure 2). Some regional variation in the TFR remains and will be discussed in Chapter 3.

1 *Survey of Population and Family Planning, Census, Intercensal Demographic Survey.*

2 *Multi-Indicator Cluster Survey (MICS).*

3 *The 2010 and 2013 MCH service network surveys.*

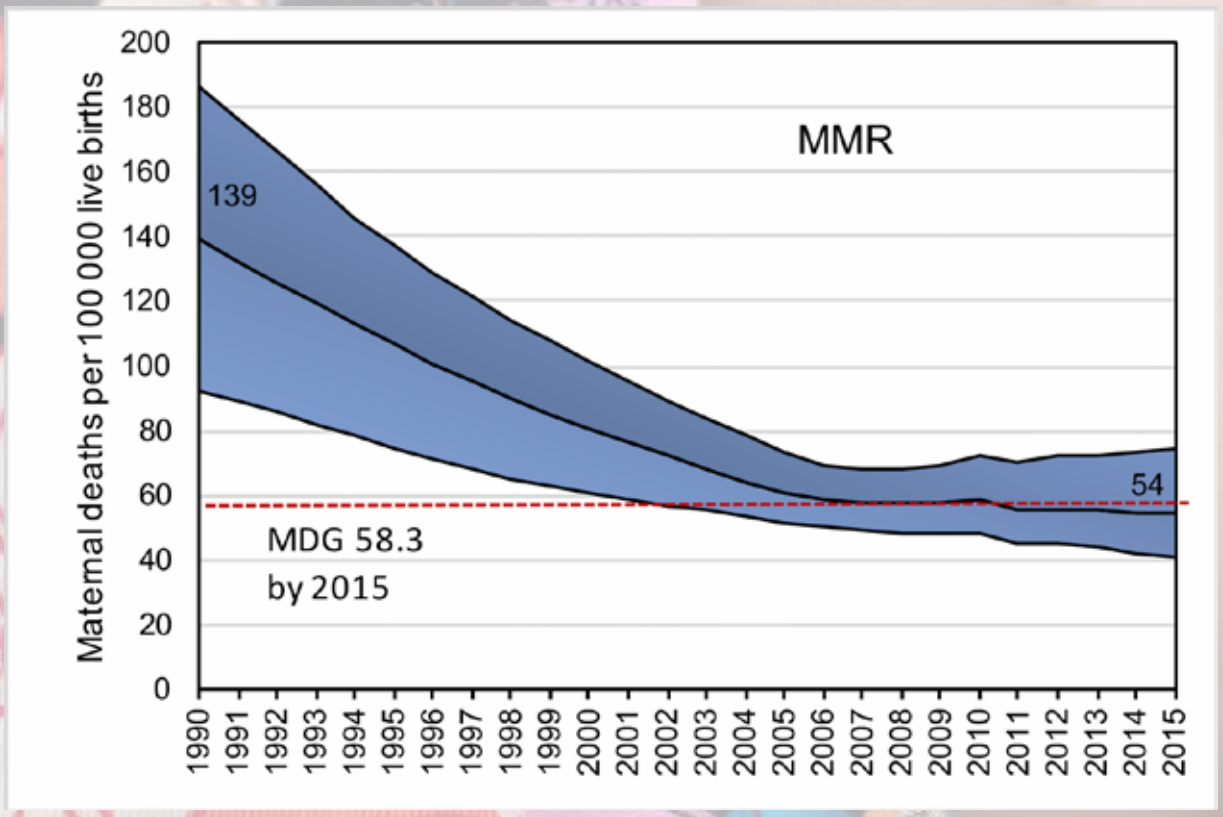
**Figure 2: Total fertility rate in Viet Nam, 2001-2015**




In 2014, contraceptive prevalence rates nationally were 75.7% of all married women aged 15-49, somewhat higher in rural areas (76.8%) compared to urban areas (73.4%). Unmet need for contraception was estimated at 6.1% in the same year [6], an increase from 4.3% in 2011 [7]. Traditional methods of contraception are used by a relatively high share of married women of reproductive age (18.8%).

**Viet Nam has made strong progress in reducing maternal, neonatal and infant mortality.** From 1990 until 2015, Viet Nam reduced the maternal mortality ratio from 139 to 54, exceeding the Millennium Development Goal (MDG) target of 58.3 maternal deaths per 100,000 live births (Figure 3). This means that Viet Nam had about 860 maternal deaths in 2015. However, there is substantial uncertainty around these estimates, as indicated by the blue area around the line. Viet Nam does not have annual estimates of maternal mortality from surveys, MCHD routine reporting systems, or vital statistics systems.

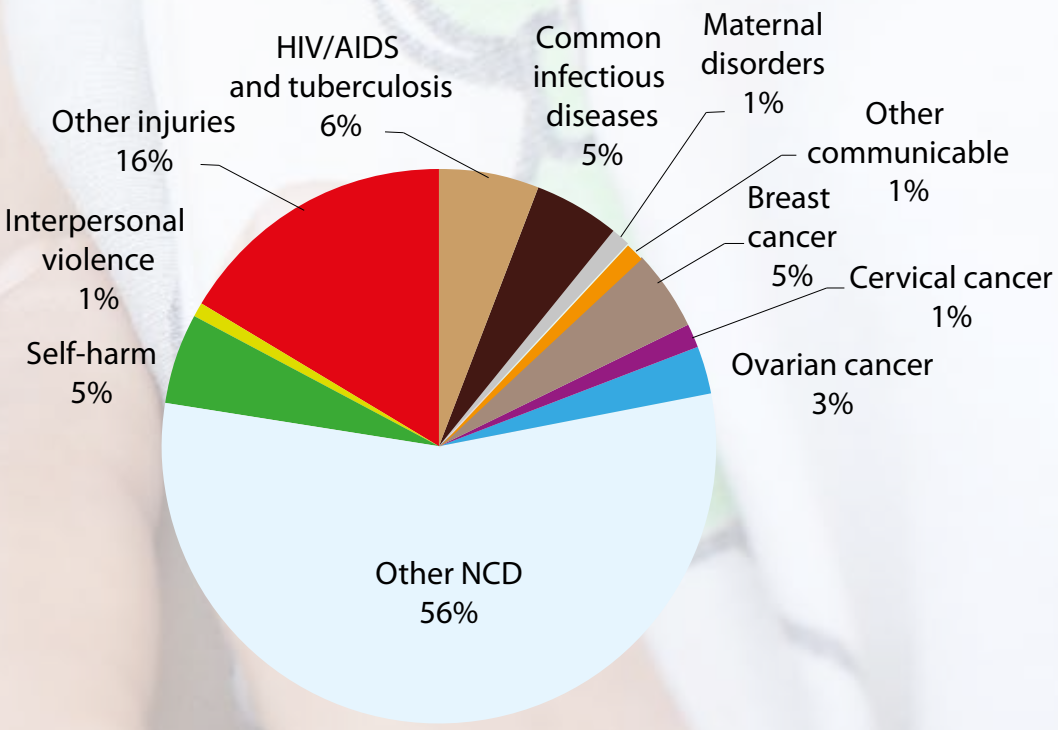
**Figure 3: Maternal mortality ratio in Viet Nam, 1990-2015**




*Source: WHO 2015. Trends in maternal mortality: 1990 to 2015 [8] November 2015 update. Data files at http://www.who.int/reproductivehealth/publications/monitoring/maternal-mortality-2015/en/.*

Maternal mortality, while a tragic loss to families, accounts for only about 1% of all deaths to women of childbearing age (Figure 4). A number of other causes of death for women are within the scope of midwifery work (marked in blue in Figure 4 below), including HIV prevention and management, gynaecological cancer screening and treatment, and gender-based violence.

**Figure 4: Cause of death in women aged 15-49, 2015**




*Note: NCD=Non-communicable disease.*

*Source: Global Burden of Disease Study 2015 [9]. Data downloaded 15 November 2016.*

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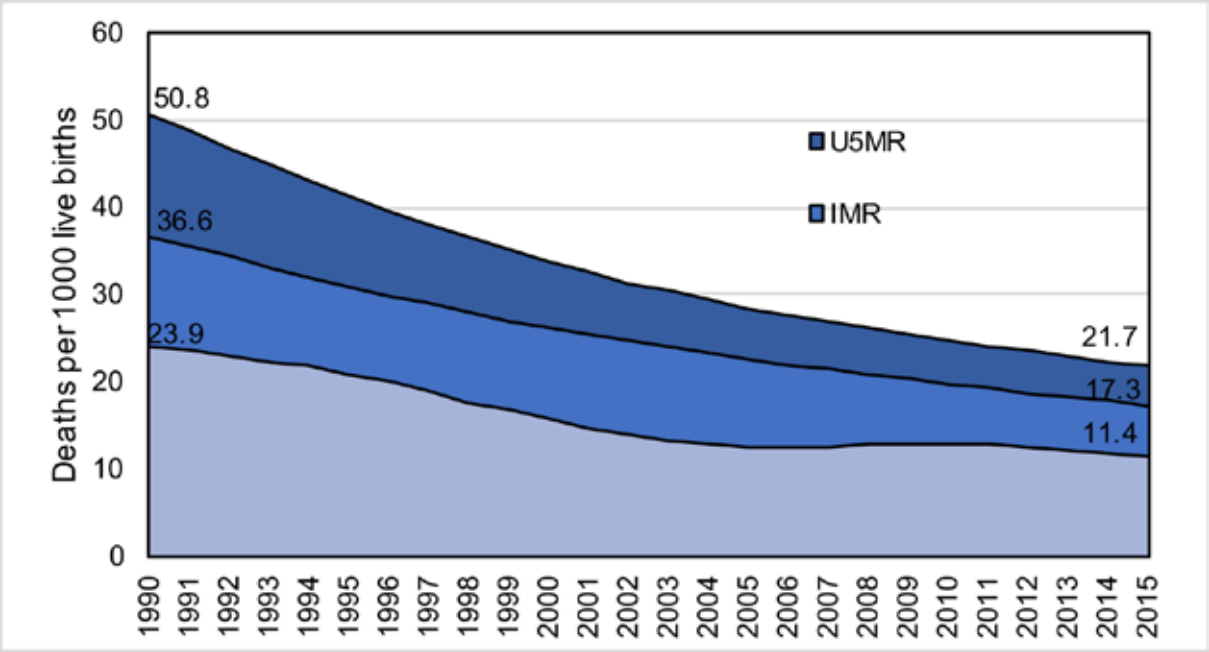
During the same period of 1990 to 2015, neonatal mortality declined from a point estimate of 23.9 to 11.4 per 1,000 live births (Figure 5). This rate translates to 16,900 neonatal deaths in Viet Nam in 2015. Neonatal mortality constitutes about half of under-five mortality and two-thirds of infant mortality. However, the UN estimates displayed in the figure are somewhat different from national estimates for the period; Viet Nam government estimates indicate a decline in the infant mortality rate from 44.0 to 14.7 during 1990-2015, and a fall in the under-five mortality rate from 58.0 to 22.1, thus achieving the MDG for the infant mortality rate (14.8), but falling short of achieving the MDG for the under-five mortality rate (19.3)[1]. Consistent national estimates are not available to show trends in the neonatal mortality rate.

**Figure 5: Trends in child, infant, and neonatal mortality rates in Viet Nam, 1990-2015**

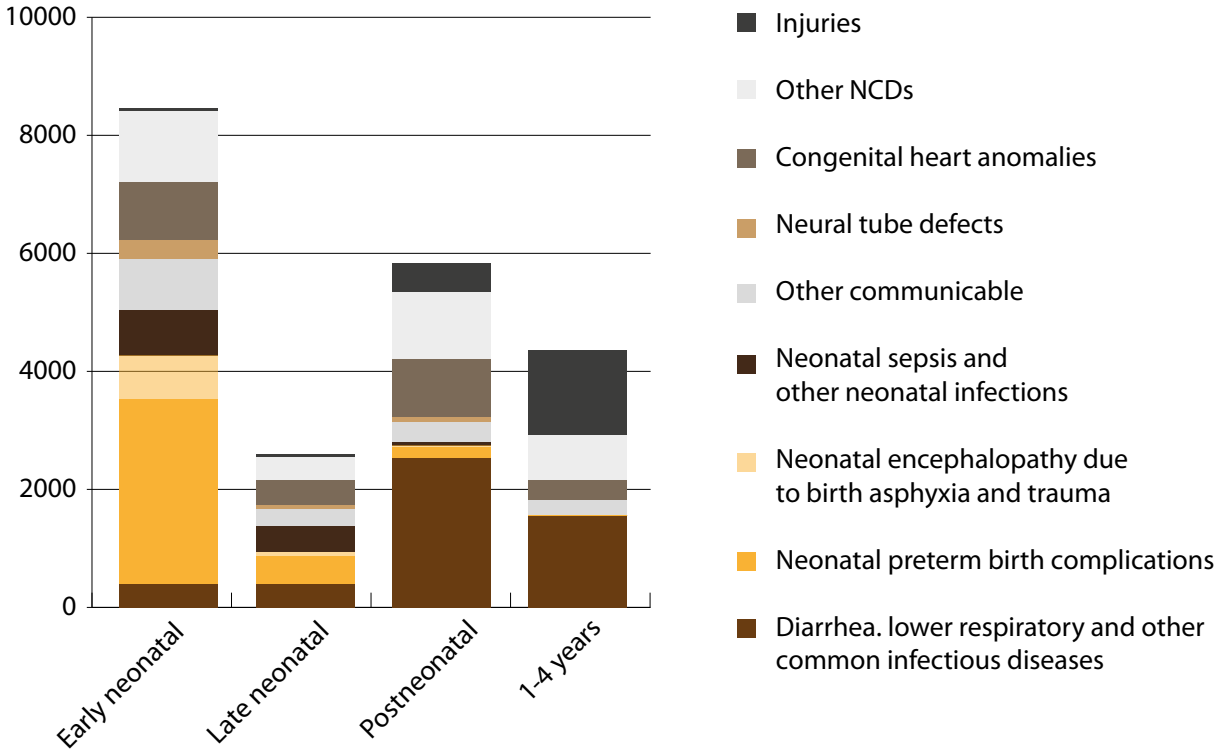



*Note: U5MR=Under five mortality rate; IMR=infant mortality rate; NMR=neonatal mortality rate.*

*Source: UN Inter-agency Group for Child Mortality Estimation (2015) [10]. Updated 9 September 2015. downloaded from http://www.childmortality.org.*

The cause of death varies substantially by age (Figure 6). However, neonatal asphyxia and sepsis are important, preventable causes of death in this age group [11]. Neonatal deaths attributed to these causes indicate substantial shortcomings in quality of midwifery services. Common childhood infections are the main cause of death of children aged over one month and up to five years. Injuries become more important the older the child is. Congenital heart anomalies remain an important cause of death in children under age five. Many of these causes are preventable or reducible.

**Figure 6: Cause of death by child age in Viet Nam, 2015**




*Note: NCD=Non-communicable disease.*

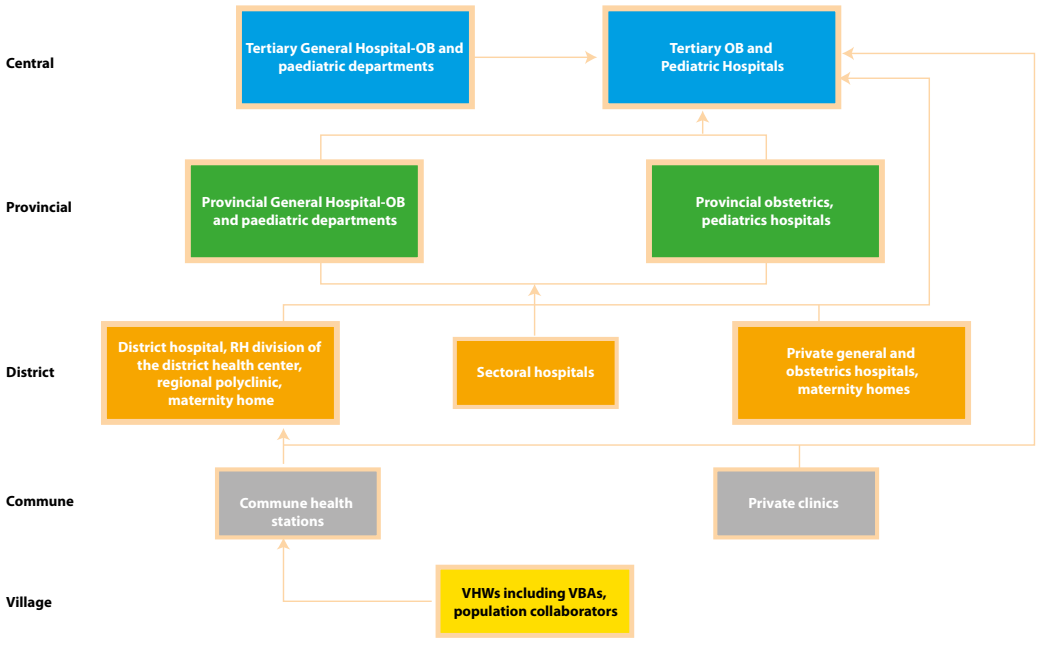
*Source: Global Burden of Disease Study 2015 [9]. Data downloaded 15 November 2016..*

## 1.3. Health system to provide midwifery services

Viet Nam's midwifery service delivery covers a broad geographic area with diverse forms of facilities providing different mixes of services (Figure 7). Government service provision is set up in a hierarchy of four levels of facilities, with village health workers (VHWs) or population collaborators providing outreach to the village level. Lower-level facilities provide basic primary care services and higher-level facilities provide more specialized technical services, as formalized in Circular No. 43/2013/ TT-BYT and MOH Decision 385/2001/QD-BYT (for reproductive health services). Referrals are regulated by the separate Circular No. 14/2014/TT-BYT. The referral network is in place for lower-level facilities to transfer patients to designated referral facilities when patient needs exceed the capacity of the facility. However, patients can simply bypass any level of facility to seek care wherever they want, which is often at a higher level than needed.

However, there is also a growing private sector providing primary, secondary, and even tertiary reproductive health services. There is little information about the number of private reproductive health care facilities or practitioners, which makes it difficult to assess their contribution to reproductive health in the country. They are represented in Figure 7, with private clinics providing primary-level care and private hospitals providing secondary-level care. Some private hospitals provide high-tech OB services and may be more comparable to provincial than district hospitals. There are also a very small number of private maternity homes (birthing centres), although the authors were not able to gather any information about them for this study.

**Figure 7: Structure of reproductive health and maternal and child health facilities and the referral system in Viet Nam, 2016**




*Note: OB=obstetrics; VBAs=village birth attendants; VHWs=village health workers*

*Source: Adapted from MOH Circular No. 43/2013/ TT-BYT dated 11/12/2013 stipulating the detailed assignment of technical services to different level medical service facilities.*

Table 2 shows the widespread coverage of reproductive health facilities across regions of the country. It also shows that the mix of providers, concentrated at the primary care level, is appropriate for the Midwifery 2030 Vision and for the current MOH agenda to strengthen primary health care, and to ensure that health service is provided close to the people.

## Table 2: Public reproductive health care providers by region of Viet Nam, 2013

| | Regions+ | | | | | | |
|---|---|---|---|---|---|---|---|
| Facility type | RRD | NMM | NSCC | CH | SE | MRD | Total |
| Central OB/ paediatric hospitals† | 2 | 0 | 0 | 0 | 3 | 0 | 5 |
| Central general hospitals with OB or paediatrics * | 1 | 2 | 3 | 0 | 0 | 1 | 7 |
| Provincial and regional general hospitals with OB/ paediatric depts. | 32 | 27 | 36 | 10 | 18 | 33 | 156 |
| Public OB hospitals | 6 | 1 | 1 | 0 | 2 | 1 | 11 |
| Public paediatric hospitals | 5 | 1 | 2 | 0 | 3 | 1 | 12 |
| Public OB/paediatric Hospitals | 4 | 2 | 2 | 0 | 0 | 1 | 9 |
| Districts with district hospital or health centre | 124 | 144 | 169 | 61 | 69 | 131 | 698 |
| District hospitals | | | | | | | |
| (Health statistics yearbook 2014)‡ | 114 | 137 | 153 | 54 | 62 | 109 | 629 |
| Regional polyclinic | 105 | 199 | 106 | 51 | 43 | 91 | 595 |
| Regional polyclinics (Health statistics yearbook 2014) | 82 | 195 | 76 | 50 | 54 | 87 | 544 |
| Commune health station | 2493 | 2340 | 2901 | 720 | 868 | 1583 | 10905 |
| Commune health station (Health statistics yearbook 2014) | 2462 | 2547 | 2899 | 721 | 872 | 1600 | 11101 |

*+RRD=Red River Delta; NMM=Northern Midlands and Mountains; NSCC=North and South Central Coast; CH=Central Highlands; SE=Southeast; MRD=Mekong River Delta.*

** E hospital, Thai Nguyen General, Uong Bi General, Viet Nam Cuba-Dong Hoi, Hue General, Quang Nam General, Can Tho General. (From MOH website)*

*†Tu Du, Paediatrics I and Paediatrics II hospitals in HCMC are provincial hospitals designated as leading tertiary hospitals by the MOH.*

*‡Some districts have a health centre that provides both hospital and preventive care services, while other districts have separate hospitals and health centres. The districts without hospitals may have inpatient care available through the district health centre, but this is not clear from the statistics.*

*Source: MCHD Survey 2013 [5] MOH Health Statistics Yearbook (HSY) 2014 [12].*

Besides the main health system providing reproductive health services listed above, Viet Nam has two key specialized networks that complement the general health system.

The **population and family planning network** is in place to provide counselling and advice about family planning services. It is headed at the top by the General Office of Population and Family Planning (GOPFP) of the MOH, and has provincial population and family planning offices in all provinces, district population offices in the districts, dedicated population worker at the commune health stations, and 167,185 population collaborators operating at the community level.[4] This parallel system directly distributes pills and condoms to some population groups, but refers patients to the medical system where midwives provide most clinical forms of birth control such as sterilization, intrauterine devices (IUDs), implants, or injections.

An integrated package of reproductive health, sexually transmitted infection (STI), HIV/AIDS, and prevention of mother-to-child transmission of HIV (PMTCT) services has been developed, and are to be provided through commune health stations and provincial reproductive health centres together with two other health settings the HIV/AIDS service network and the STI service network (mainly provincial dermatology centres and social disease centres) [MOH Decision 2295/QD-BYT (2016]). The **HIV/AIDS network** is headed by the Viet Nam Administration of HIV/AIDS Control, with 63 provincial HIV/AIDS control centres. In addition, there is a broad network of 1,350 voluntary testing and counselling centres covering 100% of districts throughout the country, and 312 ARV treatment centres.[5] The master plan for a dermatology specialist network was issued in 2015 (Decision 5656/QD-BYT) with plans for a major expansion of dermatology specialist facilities and capacities at all levels, including prevention, diagnosis, and treatment of STIs.

## 1.4. Legal framework for midwifery profession and services

The National Reproductive Health Strategy for 2001-2010 initiated a period of intensive action and rapid improvements in reproductive health, including efforts to reduce disparities in health outcomes, especially for disadvantaged groups. This was followed by the second and current strategy, the Viet Nam Population and Reproductive Health Strategy for the period 2011-2020, with a more comprehensive scope of reproductive health goals. This strategy was operationalized through a series of five-year and 10-year national action plans and programs (Table 3). Both action plans to implement the Viet Nam Population and Reproductive Health Strategy for the period 2011-2020 emphasize reducing maternal and neonatal mortality and continued priority on disadvantaged regions. The village birth attendant (VBA) strategy is maintained.[6] At the same time, increased emphasis is being placed on ensuring that obstetricians are available at the district level, serving as the first level for referrals. In the first of these national action plans, the MDGs are emphasized. In 2014, as the MDG target year approached, the MOH issued Decision 5438/QD-BYT to intensify policymaking to ensure the health MDGs would be achieved. In 2015, the ministry issued Directive 01/CT-BYT to further intensify actions to reduce maternal and child mortality to meet the MDG targets. The National Action Plan for the period 2016-2020 is now refocusing the health sector's attention on the Sustainable Development Goals (SDGs).

4 *MOH Decision No. 2177/QD-BYT dated 27/6/2011 approving the comprehensive condom program in Viet Nam for the period 2011-2020. [về việc phê duyệt "Chương trình tổng thể Bao cao su tại Việt Nam giai đoạn 2011-2020"].*

5 *VAAC. Update HIV/AIDS treatment in the first six months of 2015. [Cập nhập tình hình điều trị bệnh nhân HIV/AIDS trên toàn quốc 6 tháng năm 2015]. Updated 02/03/2015, accessed at http://vaac.gov.vn/solieu/Detail/Cap-nhap-tinh-hinh-dieu-tri- benh-nhan--tren-toan-quoc-6-thang-nam- 2015.*

6 *VBAs are sometimes referred to as ethnic minority midwives, since the policy is only applied to ethnic minority areas where women are not accessing commune-level antenatal and birthing services. However, the term midwife is now reserved only for those with professional midwife training according to Circular 26, so village birth attendant is the more appropriate translation of the Vietnamese term.*

## Table 3: Major policies affecting midwifery services and midwives

| Policy code | Policy name | Midwives mentioned in policy |
|---|---|---|
| Prime Ministerial Decision 136/2000/QD-TTg 28 November 2000 | Approval of the National Reproductive Health Strategy in the period 2001-2010 | No |
| Prime Ministerial Decision 147/2000/QD-TTg 22 December 2000 | Approval of the Viet Nam Population Strategy in the period 2001-2010 | No |
| Prime Ministerial Decision 2013/QD-TTg 14 November 2011 | Approval of the Viet Nam Population and Reproductive Health Strategy for the period 2011-2020 (replaced Decision 136/2000/QD-TTg) | No |
| MOH Decision 2718/QD-BYT 2 August 2012 | Approval of the National Action Plan on Reproductive Health Care, focused on safe motherhood and neonatal care, for the period 2011-2015 | Yes, including VBAs and ensuring birth attendance skills in commune health stations |
| MOH Decision 5438/QD-BYT 30 December 2014 | Issuing the action plan of the health sector to implement Government Resolution 05/NQ-CP (2014) to intensify implementation of the health sector MDGs | No |
| MOH Directive 01/CT-BYT 9 January 2015 | Strengthen care of mothers and newborns to reduce maternal and neonatal mortality | Yes |
| MOH Decision 2565/QD-BYT 17 July 2009 | Approval of the Action Plan for Child Survival for the period 2009-2015 | Yes |
| MOH Decision 4177/QD-BYT 3 August 2016 | Approval of the National Action Plan for Maternal, Neonatal and Child Health Care for the period 2016-2020 | Yes |
| MOH Decision 1613/2002/QD-BYT 3 May 2002 | Approval of the National Action Plan for Strengthening Nursing and Midwifery for the 2002-2010 period | Nurses combined with midwives |
| MOH Decision 1215/QĐ-BYT 12 April 2013 | Issuing the National Action Program to Strengthen Nursing and Midwifery in the period till 2020 | Yes |
| Joint Circular 26/2015/TTLT-BYT-BNV of the MOH and Ministry of Home Affairs 7 October 2015 | Regulates the occupational codes and standards for nurses, midwives, and medical technicians | Yes |
| Prime Ministerial Decision No. 153/2006/QD-TTg 30 June 2006 | Approval of the Master Plan for the Development of the Health System for the period to 2010 and vision to 2020 | Yes |
| Prime Ministerial Decision 122/QD-TTg 10 January 2013 | Approval of the National Strategy for the Protection, Care and Promotion of the People's Health for the period 2011-2020, and vision to 2030 | Yes (indicator for commune health stations) |
| MOH Plan 139/KH-BYT 1 March 2016 | Plan for the Protection, Care and Promotion of the People's Health for the period 2016-2020 | Yes, focus on training |
| MOH Decision 2992 17 July 2015 | Approval of the Human Resources Development Plan in the Medical System for the period 2015-2020 | No |

While the above overarching reproductive health strategies and policies cover key aspects of midwifery services, there are three documents that orient attention towards the midwives themselves. The first National Action Plan for Strengthening Nursing and Midwifery for the 2002-2010 period set the goal of ensuring comprehensive patient care in health facilities and expanding care services to families and the community, while reaching regional standards and global integration. In 2013, the updated action plan to the year 2020 adopted similar goals, but switched from an emphasis on comprehensiveness to safety, quality, and responsiveness to the population's needs and ensuring their satisfaction, while continuing efforts to align Viet Nam's standards with regional and global standards for midwives. The third document is the very important Joint Circular 26/2015/TTLT-BYT-BNV (hereafter referred to as Circular 26), which regulates the scope of work and qualifications for midwives in order to meet Association of Southeast Asian Nations (ASEAN) standards. This document has strong implications for the need for upgrade training for the majority of working midwives. In the short term, the policy may lead to major disruptions in midwifery service provision, since the policy severely restricts the scope of work for junior college and secondary midwives, who are essential reproductive health service providers at the grassroots level.

The importance of midwives and reproductive health services within the health sector is evident also in the broader national health strategy, health sector master plan, and five-year health sector plan. Surprisingly, in the Human Resources Plan for the Medical System 2015-2020, the key plan that this report aims to contribute to, midwives are not mentioned. Devolution in provision of services, health worker training, continuing medical education, health worker management, and health financing has been implemented strongly, which can complicate efforts to implement national strategies and plans since priorities and resources vary across localities.

# CHAPTER 2
# Research methods

**This report was written based on the existing analytical framework and some basic methodologies and concepts from the State of the World's Midwifery (SoWMy) 2014 report. The specific methodologies used for Viet Nam's report were recommended by UNFPA in the terms of reference for this study and consist of a mix of primary and secondary data collection, and quantitative and qualitative analysis.**

## 2.1. Background of the report

The Viet Nam Midwifery Report (VMR) 2016 was developed following the structure and orientation of the SoWMy Reports in 2011 and 2014 [13,14]. Midwifery services are key elements of sexual, reproductive, maternal, and newborn health (SRMNH) care, and are defined in this report as: the health services needed to support and care for women and newborns, including sexual and reproductive health, and especially pregnancy, labour, and postnatal care [14]. As Viet Nam pursues a primary health care-focused strategy towards achieving the SDGs, midwifery services and midwife-led care play a crucial role. This study is needed to provide the evidentiary foundation for future reproductive health services development.

Although this report has a broad scope to describe the state of Viet Nam's midwifery services and workforce from the first National Reproductive Health Strategy (2001) to the present, it is intended to contribute to Viet Nam's development and implementation of the strategic human resource plan on sexual and reproductive health, a part of UNFPA's support to Viet Nam. As such, the report focuses extensively on professional training, deployment, and regulation of midwives and maternity services. The report promotes a midwife-centred approach to reproductive health services, due to the potential for midwives to contribute substantially to improving many aspects of reproductive health in Viet Nam, with the understanding that midwives who are educated and regulated to international standards can provide approximately 87% of essential care needed for women and newborns [15].

### *2.1.1. Global midwifery report and analytic framework*

In 2011, the first SoWMy Report was launched, the culmination of a collaborative effort coordinated by UNFPA involving nearly 30 leading academic, non-governmental organizations (NGOs), international agencies and development partners working in the area of maternal and child health and reproductive health. Relying on fresh evidence and analysis, the first SoWMy Report identified common challenges and pointed out promising ways to strengthen midwifery services globally. In 2014, the second SoWMy was published through a continued collaboration of these partners to provide an updated evidence base and a consensus on best practice. Key aims were to support policy dialogue between developing countries and development partners, speed up progress in achieving health MDGs, and inform the post-2015 development agenda. Alongside these reports, the authors of the VMR also drew on two series in a leading medical journal, the Lancet, which laid the foundation for future improvements in this area: the 2014 Lancet series on midwifery and the 2016 series on maternal health.

The terms "midwifery" (services) and "midwife" (the professional group educated as midwives) were defined in the SoWMy 2014 and the Lancet series and these definitions have been used throughout this report (Box 1).

## Box 1: Definition of midwife and midwifery

The International Labour Organisation describes midwives as the primary professional group to provide midwifery services [16]. The International Confederation of Midwives (ICM) defines the work of midwives and core competencies and standards for their education and practice [17].

"A **midwife** is a person who has successfully completed a midwifery education programme that is duly recognised in the country where it is located and that is based on the ICM' Essential Competencies for Basic Midwifery Practice and the framework of the ICM' Global Standards for Midwifery Education; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'; and who demonstrates competency in the practice of midwifery" [18].

**Midwifery** services are defined as: "Skilled, knowledgeable and compassionate care for childbearing women, newborn infants and families across the continuum throughout pre-pregnancy, pregnancy, birth, postpartum and the early weeks of life. Core characteristics include optimising normal biological, psychological, social and cultural processes of reproduction and early life, timely prevention and management of complications, consultation with and referral to other services, respecting women's individual circumstances and views, and working in partnership with women to strengthen women's own capabilities to care for themselves and their families [15]."

Midwifery services can be provided by a range of health professionals and in Viet Nam these include graduates of the 2 and 3-year midwifery training courses, OB/GYN physicians, general practitioners and general assistant doctors, OB-paediatric assistant doctors, nurses, and VBAs. **Internationally, midwifery is associated with more efficient use of resources and improved outcomes when provided by midwives who were educated, trained, licensed, and regulated and who are working within an effective interdisciplinary team integrated across facility and community settings**. When midwives are enabled to provide continuity of midwifery care outcomes improve across all gestational ages, including significantly fewer interventions in birth (less epidural or other analgesia, amniotomy, episiotomy, and instrumental births), and less women experiencing a preterm birth, foetal, or neonatal death [19]. Women receiving continuity of midwifery care also experience more spontaneous vaginal births and reported higher satisfaction scores and sustained breastfeeding rates. The Lancet series on midwifery findings support a system-level shift, from fragmented maternal and newborn care focused on identification and treatment of pathology, to skilled care for all, with preventive and supportive care, and treatment of pathology when needed through interdisciplinary teamwork and integration across facility and community settings. Midwives and midwifery services are pivotal to this approach [15].

The SoWMy report introduced a new framework for the provision of woman-centred SRMNH and adolescent health care, known as the Midwifery 2030 Pathway to Health (See Annex 1, summarized in Figure 8), which emphasizes the crucial contribution of midwives to reproductive health and maternal and child health within an integrated system of reproductive and primary health care.

**Figure 8: Midwifery 2030 Pathway to Health**

| Pre-pregnancy | During pregnancy | In childbirth | Post-partum and post |
|---|---|---|---|
| - Comprehensive sex education<br>- Prevention of HIV, STIs -Maintenance of good health and nutrition<br>- Family planning using effective contraception | - Maintain health and nutrition of mother and fetus<br>- Antenatal care (4 or more visits) including preparation for birth and birth planning to pre- determine preferences for how to deal with complications if they arise.<br>- Supportive and preventive pregnancy care to maintain health of the mother and fetus, and when necessary effective treatment of complications or adverse events<br>- Advice, care related to abortion | - Access to delivery services at onset of labor<br>- Respectful, supportive delivery services that prevent adverse events<br>- Services with adequate equipment, consumables, medicines and accessibility to emergency obstetric services when needed.<br>- Participation in decisions and choices for care of the mother and newborn<br>- Experience no unnecessary interventions during childbirth<br>- Access specialized services in cases of obstetric complications | - natal Breastfeed immediately after birth, support for breastfeeding according to mother's preferences.<br>- Provide information and support care of the newborn and child -Receive information on family planning to space births<br>- Supported to access medical services, including immunizations according to schedule, and post-partum depression care. |

The Midwifery 2030 Pathway to Health provides the international consensus on the vision of scope of services that midwives should provide to obtain optimal outcomes for mothers, children, and health systems. Specifically, the international vision of the role of midwives includes:

- Midwives, adequately trained and with necessary equipment, consumables, and medicines, and supportive supervision, can autonomously provide 87% of essential reproductive health services;
- Midwives, in a friendly, continuous relationship with women prior to, during pregnancy, during childbirth and post-partum play an important role in ensuring mother and child health including social and emotional health and well-being, early detection of risks, support to seek specialized care when needed, and contribute to reducing maternal and newborn mortality.
- Midwives not only provide antenatal care and assistance at delivery, but participate in sexual health, family planning service provision, contribute to detecting domestic violence, provide advice to prevent sex selective abortion, advise on newborn and child care, and provide youth-friendly services.

The Pathway contains 10 foundations (See Box 2), which will be examined in relation to Vietnamese midwifery in the various sections of the VMR 2016.

## Box 2: The 10 foundations of the Midwifery 2030 Pathway to Health

1. All women of reproductive age, including adolescents, have **universal access to midwifery care** when needed (the first and second components of Universal Health Coverage). (Section 3.3 Accessibility)

2. Governments provide and are held accountable for a **supportive policy environment.** (Section 3.6 Legal framework)

3. Governments and health systems provide and are held accountable for a **fully enabled environment.** (Section 3.2 Availability)

4. **Data collection and analysis are fully embedded** in service delivery and development. (Section 3.5 Quality)

5. **Midwifery care is prioritized in national health budgets;** all women obtain universal financial protection (the third component of Universal Health Coverage). (Section 3.3 Accessibility)

6. **Midwifery care is delivered in collaborative practice** with health-care professionals, associates, and lay health workers. (Section 3.2 Availability)

7. **First-level midwifery care is close to the woman and her family with seamless transfer to next-level care.** (Section 3.3 Accessibility)

8. The midwifery workforce, in communities, facilities and hospitals, is supported through **quality education, regulation, and effective human and other resource management.** (Section 3.2 and 3.5)

9. All health care professionals provide and are enabled to deliver **respectful quality care.** (Acceptability)

10. **Professional associations provide leadership** to their members to facilitate quality care through advocacy, policy engagement, and collaboration. (3.5 Quality)

In keeping with the human rights-based approach, this report supports women's rights to:

- Access quality reproductive healthcare services (geographic access, financial support);
- Receive adequate information to understand the risks and benefits of each intervention and decide whether to accept the intervention or not; and
- Have quality of services ensured (effective, appropriate with need, not over servicing or underservicing, and respectful of the client).

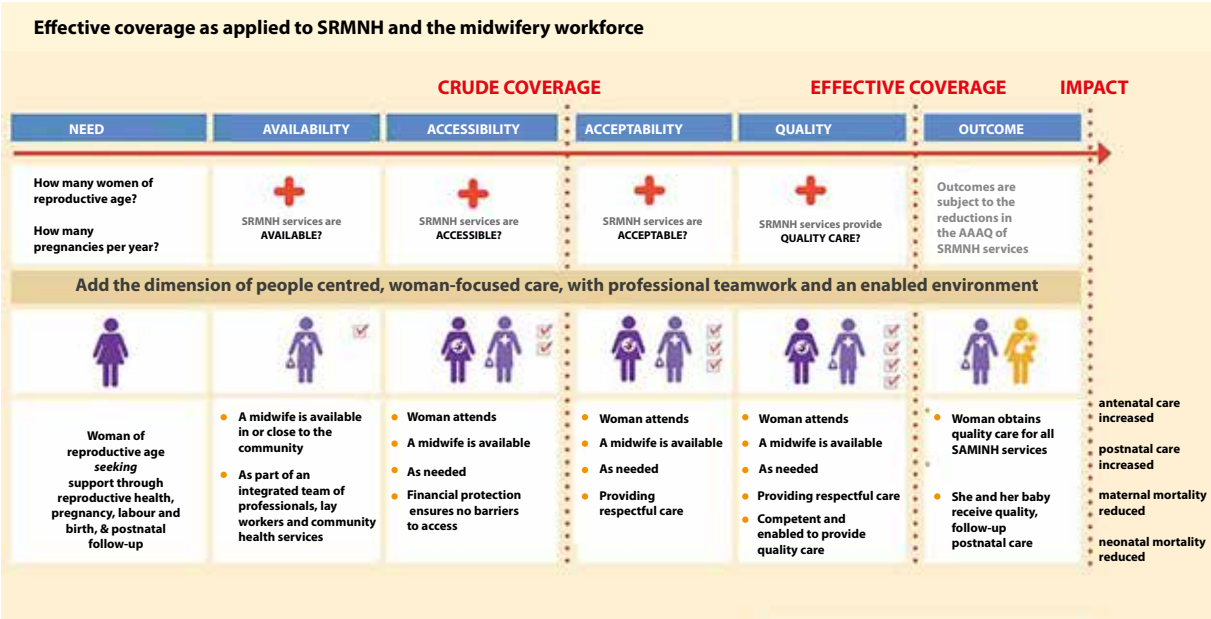
The report also supports a vision of equity in midwifery care with many dimensions:

- Women in all regions can access quality essential services and have an option for referral when needed;
- Poor women face no financial barriers to accessing reproductive health services;
- Ethnic minority women can access services that are respectful of their preferences; and
- Youth can access friendly sexual and reproductive health services, support to prevent illness, and maintain reproductive and sexual health.

### *2.1.2. Structure of the VMR 2016*

The VMR 2016 structure follows the effective coverage framework of the SoWMy 2014 report presented in Figure 9. This comprehensive framework helps to focus attention on the ten foundations of the Midwifery 2030 Pathway to Health (Box 2 above). It starts with women's needs for reproductive and maternal health services and ends with achievement in utilization of antenatal and postnatal care services and reductions in maternal and newborn mortality. While availability of services is an element of the framework, the further aspects of accessibility, acceptability, and quality of care are given special attention, as they are crucial to the effectiveness of midwifery services achieving the desired impact.

## Figure 9: SoWMy framework on effective midwifery coverage




*Source: Jim Campbell, Ics Integrare. Adapted from Campbell et al,2013 125 colston, 2011 122. framework*

The effective coverage framework is comprehensive and allows for incorporation of specific issues related to the quality of maternal and newborn care framework presented in the Lancet [15]. The framework also encompasses the three main areas of support to national midwifery: education, regulation, and an effective professional association.

### *2.1.3. Scope of VMR 2016*

The VMR covers the profession of midwife as well as midwifery services, which may be performed by other trained health workers. The scope of midwifery services covered in this report includes preventing pregnancy; abortion-related services; prevention, detection, and treatment of STIs/RTIs; antenatal care; PMTCT of HIV; care during birth; and post-partum/postnatal care. The broader scope of reproductive health, sexual health, and maternal and child health, including areas of andrology, sexual health, infertility treatment, menopause care, health care for children beyond the neonatal period, domestic violence detection and referrals, and foetal sex-selection will not be covered extensively in the report, although the scope of practice and training of the Vietnamese midwife do include some of these areas. The report will cover the achievements over the period from 2001 to the present, but most of the report will focus on recent trends and the current situation, mainly the period from 2010 (the baseline for the Viet Nam Population and Reproductive Health Strategy 2011-2020) to the present.

### *2.1.4. Conceptual and analytic framework for VMR 2016*

The VMR 2016 is closely tied to the overall SoWMy series of reports and the SoWMy approach to situation assessment using toolkits. Emphasis is placed on the underlying approach to determine best practice through review of scientific evidence combined with a participatory, consensus-making process (involving midwives, clients, and others).

Viet Nam is currently transitioning from the traditional medical model of care towards the newer midwifery childbirth model of care, and faces many important challenges as it strives to modernize midwifery by 2030 following the midwife-led model shown in Figure 10. However, it is a good time to pursue this effort as several other policy agendas are being promoted that align well with this vision, particularly the family practice model and the agenda for primary health care strengthening.

## Figure 10: Viet Nam midwifery in transition

| The Midwife Model of Care | The Medical Model of Care |
|---|---|
| **Definition of Birth** | |
| • Birth is a social event, a normal part of a woman's life.<br>• Birth is the work of the woman and her family.<br>• The woman is a person experiencing a life-transforming event. | • Childbirth is a potentially pathological process.<br>• Birth is the work of doctors, nurses, midwives and other experts.<br>• The woman is a patient. |
| **Birthing Environment** | |
| • Home or other familiar surroundings.<br>• Informal system of care. | • Hospital, unfamiliar territory to the woman.<br>• Bureaucratic, hierarchical system of care. |
| **Philosophy and Practice** | |
| • See birth as a holistic process.<br>• Shared decision-making between caregivers and birthing woman.<br>• No class distinction between birthing women and caregivers.<br>• Equal relationship.<br>• Information shared with an attitude of personal caring.<br>• Longer, more in-depth prenatal visits.<br>• Often strong emotional support.<br>• Familiar language and imagery used.<br>• Awareness of spiritual significance of birth.<br>• Believes in integrity of birth, uses technology if appropriate and proven. | • Trained to focus on the medical aspects of birth.<br>• "Professional" care that is authoritarian.<br>• Often a class distinction between obstetrician and patients.<br>• Dominant-subordinate relationship.<br>• Information about health, disease and degree of risk not shared with the patient adequately.<br>• Brief, depersonalized care.<br>• Little emotional support.<br>• Use of medical language.<br>• Spiritual aspects of birth are ignored or treated as embarrassing.<br>• Values technology, often without proof that it improves birth outcome. |

*Source: Adapted from www.birthlink.com/resources/midwife-versus-medical.html*

### *2.1.5. Partners in developing the VMR 2016*

The VMR 2016 has been written by an international consultant team comprised of one expert in Viet Nam and one in Australia. The consultant in Viet Nam has a broader health systems background and great familiarity with the Vietnamese context, while the other complements this with extensive global theoretical and practical experience in the field of midwifery and previous work in Viet Nam. The two consultants worked in close collaboration through Skype and e-mail, and spent one week together in Viet Nam.

The work was done in close collaboration with UNFPA and an advisory group from six relevant departments and administrations of the MOH: the Department of Planning and Finance (DPF), Administration of Science, Technology and Training (ASTT), Maternal and Child Health Department (MCHD), Department of Organization and Personnel (DOP), Medical Services Administration (MSA), and the General Office of Population and Family Planning (GOPFP). Ultimately, the VMR serves to provide the MOH with an assessment of the current state of midwifery in Viet Nam, and an evidence base for further midwifery advocacy and policy and strategy development. Priority is placed on answering questions currently being asked by policymakers and regulators of the profession in Viet Nam.

## 2.2. Research methodologies used

This study assesses the current situation and progress Viet Nam has made over previous decades towards achieving the maternal and child health-related MDGs, and identifies the current challenges affecting achievement of these goals. The analytic approach included a review of Viet Nam's midwifery system (training, regulation, professional association, services) against the standards of evidence-based best practice that are being promoted and supported by the large consortium of academics, international agencies, development partners, NGOs, and others through the SoWMy and related toolkits. This comparison has helped to identify gaps and barriers to achieving the Midwifery 2030 vision in Viet Nam.

### *2.2.1. Literature and secondary data sources*

An extensive literature exists on midwifery-related issues in Viet Nam, including many studies commissioned by UNFPA, international published literature, and Vietnamese reports and studies. The international literature contains a rich basis for evidence-based midwifery practice and international benchmarks and comparisons. This has helped to inform the evaluation of Viet Nam's progress over time, including disparities between ethnic minority women and Kinh women, and where relevant, comparisons between Viet Nam and international benchmarks for service delivery. This helped to identify areas where Viet Nam has shown major achievements as well as areas for further improvement.

Viet Nam has a large number of nationally representative sample surveys covering demographic and midwifery-related issues. The National Population and Housing Census is implemented every 10 years, with data available for 1989, 1999, and 2009. The intercensal demographic surveys are implemented half-way through the decade between the censuses (i.e. 1994, 2004, and 2014), while in all other years a Survey of Population Change and Family Planning is conducted. The Demographic and Health Surveys (DHS) were implemented in Viet Nam in 1988, 1997, 2002, and 2005. Around the same time, the Multi-indicator Cluster Surveys (MICS) began to be implemented, including surveys in 1994, 2000, 2006, 2011, and 2014. The DHS was phased out as the MICS took on the relevant maternal and reproductive health indicators. The Viet Nam Household Living Standards Surveys have been implemented in even years since 2002 and contain useful

information on health insurance coverage that was used for the analysis of accessibility. The Survey Assessment of Vietnamese Youth provides an important complement to these surveys with a focus on youth, including unmarried youth who are often not asked sensitive questions in the larger surveys. This survey was implemented only twice, in 2003 and again in 2009.

The Health Management Information System provides statistics gathered annually through the routine statistical reporting system from departments and administrations and internal surveys of the MOH. A wide range of reproductive health and maternal and child health indicators are collected by the MCHD following a set of standardized forms and indicators, and are reported annually by each province. However, the data from central hospitals is not yet included in the routine recording and reporting system currently managed by MCHD. Two important surveys of the MCHD that assessed the situation of maternal and child health personnel and services in 2010 and 2013 were used extensively for this report [5,20]. Interested readers can contact that department for copies and information on their methodologies and sample design. Information from the Health Statistics Yearbook of Viet Nam was also used. While efforts have been made to ensure that these statistics cover the private sector, the coverage of private sector capacity and service availability is very limited, and this adversely affected the authors' ability to provide evidence about the availability, accessibility, acceptability or quality of these services.

Viet Nam has an extensive set of policy documents related to midwifery, including those specific to midwifery training, competencies, scope of work and professional guidelines and standards. In addition, many general policies have implications for midwifery, such as the Law on Health Insurance, Laws on Education, and the Law on Examination and Treatment. Policies are described in relevant parts of the report and listed in Annex 5.

### *2.2.2. Key informant interviews/focus group discussions*

Qualitative research methods were used extensively during a five-day mission in late October 2016 to gather information on training, deployment, and regulation of midwives and maternity services. A set of questions was developed in advance to focus the discussions on key issues that needed to be addressed in the report. During the mission, key informant interviews were organized with almost all relevant units of the MOH including the MCHD, MSA, GOPFP, DOP, and ASTT. Visits were arranged to one commune health station, one district hospital, one regional hospital, a provincial specialized OB hospital, and one private OB hospital. This allowed interactions with staff, and in some cases with midwifery students undertaking clinical practice. Unfortunately, time did not allow for interviews of facility clients. A visit was made to the Hanoi Medical College, which runs both 3-year and 2-year midwifery training programs. This allowed for further interactions with faculty and students as well as a chance to observe the training facility and simulation labs.

A focus group discussion was held with representatives of NGOs actively working in the area of midwifery. They first filled out a short survey on issues regarding respectful care and this was followed by a group discussion with a focus on understanding their views on respectful care as providers, advocates, and users of midwifery services. Additional individual visits were arranged with the representatives of Marie Stopes International, the World Bank and European Union. At the end of an intensive week, the authors presented the initial findings and received useful feedback for further refining their ideas and seeking additional information and clarifications. Unfortunately, a visit with the Viet Nam Association of Midwives (VAM) had to be cancelled, and as a result, the report's findings and recommendations related to this important organization are limited. A list of all stakeholders met during the field work is presented in Annex 2.

### *2.2.3. Online survey of medical training establishments*

Information on training plans for the transition in Viet Nam from a workforce with largely secondary-level training towards one consisting primarily of 3-year midwifery training is missing from existing data sources. In addition, as the 3-year midwifery training program was only introduced in 2010, there is a need to assess the implementation of this new curriculum and any impediments to its full implementation that should be resolved for a smoother scaling up of training. Therefore, after discussion with key stakeholders for this project, it was determined that a survey of medical training establishments was needed to find out their plans for midwifery training at different levels, and a survey was needed of the schools currently providing the 3-year midwifery program to identify the conditions and barriers they face in implementing the 3-year curriculum. The report refers to this source as the "VMR 2016 survey" in the text below.

A list of all medical training establishments at university, junior college, and secondary levels was derived from the MOET online version of "What you should know about student recruitment for university, junior college and secondary vocational education."[7] In 2016, a total of 32 universities, 49 junior colleges, and 75 secondary medical schools were found to be providing training for medical doctors, nurses, or midwives. Among these schools, it was discovered that 3-year training of midwives takes place in both universities and junior colleges, but not in secondary schools, while secondary-level midwifery training takes place in both junior colleges and secondary medical schools. Because the number of schools providing midwifery training is relatively small and no information is available on plans for midwifery training, it was decided to implement a census rather than sample survey.

Given the diversity of medical schools in Viet Nam, it was decided to implement three survey forms that complement each other but are most appropriate for different levels of facilities. Form 3 is an in-depth form created to gather information from all universities and junior colleges that had 3-year midwifery or OB nursing programs. Based on the list of medical training establishments, it was likely that this form applied to three universities and 15 junior colleges. For the universities that are not providing 3-year midwifery training, Form 1 was created to ask about current university-level midwifery-related programs, as well as plans to open 3-year midwifery training programs. And finally, for all the secondary medical schools and all junior colleges not currently providing 3-year

7 *In Vietnamese: [Những điều cần biết về tuyển sinh đại học và cao đẳng].*

midwifery training, Form 2 was created to ask about their secondary-level midwifery training (if any), plans to upgrade to junior college level (if secondary school), and plans to open up midwifery training at any level.

The survey forms were first designed in a text document to obtain feedback from MOH and UNFPA staff. The questionnaire was then revised based on feedback and translated into a Qualtrics on-line survey form. For schools not providing 3-year midwifery training, the focus of questions was on whether they were providing any midwifery training (at university or 2-year levels), and if they were, then what were their current 2016 enrolments and plans for enrolments into the future. If they were not providing training, then the questions focused on whether they had plans to introduce such training. If so, when, and what were their plans for enrolment and why were they planning to introduce this training. If they had no plans for training, they were asked why not.

For schools providing 3-year midwifery training, the survey also asked about their planned enrolments. However, the focus of questions was about the conditions for providing quality competency based, 3-year midwifery training. Questions covered the instructors and their qualifications, the core midwifery courses, clinical practice settings and number of times students must perform various midwife tasks during simulation labs and clinical practice. The questionnaires can be made available on request.

The response rate for the VMR 2016 survey was high, as the survey was introduced to all schools through an official letter from the MOH, and MOH staff followed up with cases of non-response (Table 4).

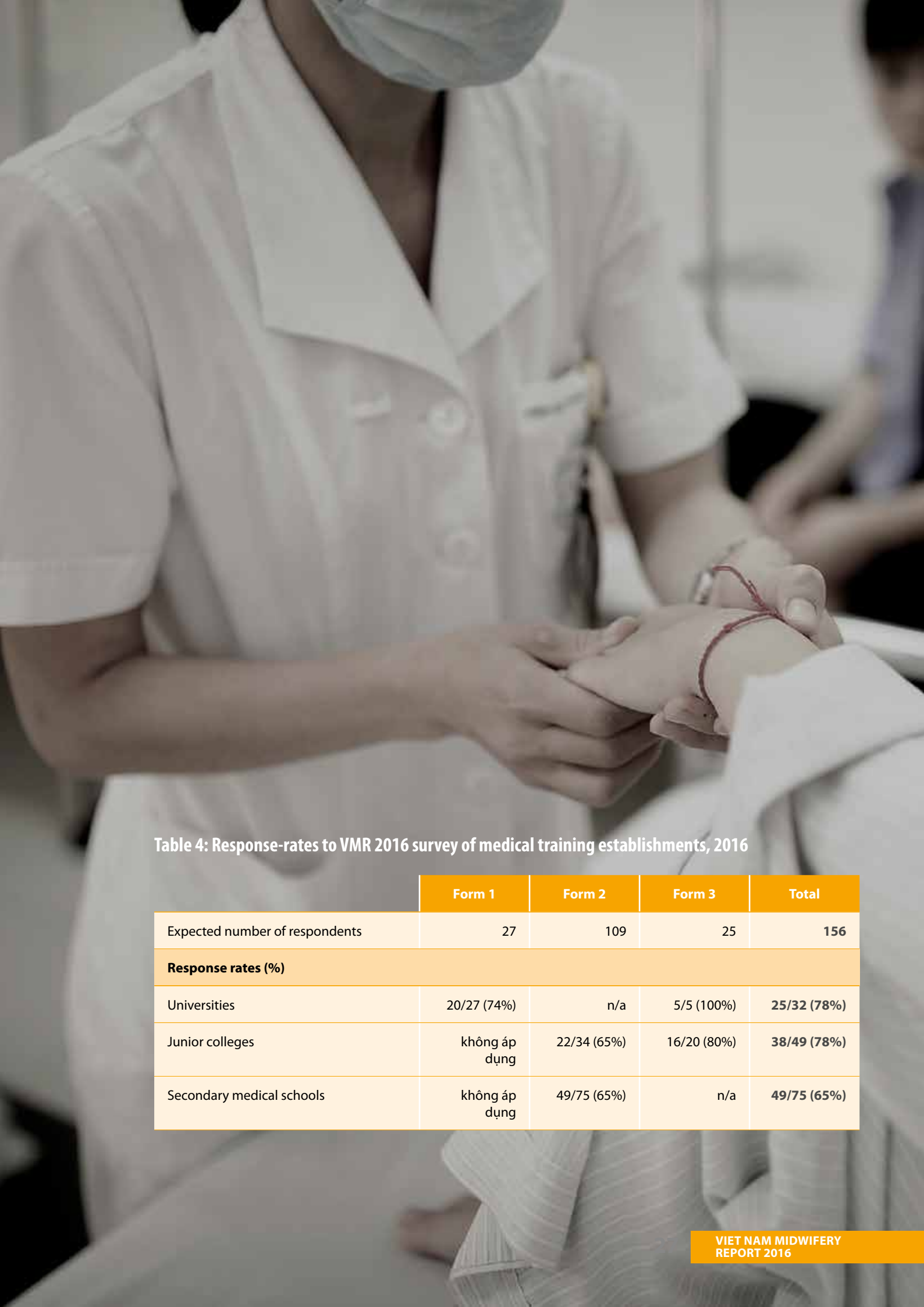


**Table 4: Response-rates to VMR 2016 survey of medical training establishments, 2016**

| | Form 1 | Form 2 | Form 3 | Total |
|---|---|---|---|---|
| Expected number of respondents | 27 | 109 | 25 | **156** |
| **Response rates (%)** | | | | |
| Universities | 20/27 (74%) | n/a | 5/5 (100%) | **25/32 (78%)** |
| Junior colleges | không áp dụng | 22/34 (65%) | 16/20 (80%) | **38/49 (78%)** |
| Secondary medical schools | không áp dụng | 49/75 (65%) | n/a | **49/75 (65%)** |

Once the data were collected, they were cleaned and edited for consistency. Schools were contacted to clarify responses that were missing or inconsistent. Data were then coded and entered into STATA software and analysed. The results are presented in the availability and quality sections of the report.

### *2.2.4. Report structure*

The report contains five chapters. The first chapter provides relevant information on the country context. Chapter 2 describes data sources and methodologies. Chapter 3 presents the findings and discussion of the findings in sub-sections on need, availability, accessibility, acceptability, quality, and the legal framework as required by the terms of reference (TOR) for the study and as presented in the SoWMy framework on effective midwifery coverage (Figure 9 above). Chapter 4 presents the conclusions and Chapter 5 presents the related recommendations.

### *2.2.5. Limitations of the report*

This report has several limitations. First, it relies largely on secondary information sources, with substantial gaps and inconsistencies between sources about the Vietnamese situation, which are mentioned explicitly throughout the report. Second, the limited time and resources available did not allow for assessment of midwife competencies as originally intended in the TOR. These competencies were assessed in a review of skilled birth attendants (SBAs) in Viet Nam conducted in 2010 [21]. This was discussed in the inception phase and it was accepted by stakeholders that an assessment of midwife competencies would not be possible as part of the 2016 report.

# CHAPTER 3
# Findings

The assessment of midwifery in Viet Nam is provided in this chapter, which is organized according to the framework mentioned in Figure 9 above. This chapter synthesizes information from the various research methods described in Chapter 2, especially section 2.2.4. In each section, an attempt is made to show Viet Nam's main achievements, and to point out additional reforms/progress that will be required to achieve the Midwifery 2030 vision in which women and newborns are the centre of midwifery services and midwives playing a central role in meeting the comprehensive reproductive health and early child healthcare needs of women and newborns, with an emphasis on evidence-based practice that promotes health.

## 3.1. Needs

The SoWMy report defined need in terms of four stages of women's reproductive care needs along their pathway to health, including the health of their infants. These include pre-pregnancy, pregnancy, childbirth, and postnatal care. Within each of these stages are a number of different specific essential interventions. The need for each of these essential interventions was assessed using available statistics or estimates following the SoWMy methodology. The need for midwife services was then estimated based on estimates of the time required for midwives to perform each service [22], with appropriate adjustments for the Vietnamese context. The Vietnamese system of service delivery was taken into account not only in the estimate of the need for services provided by midwives, but also in the estimate of the need for services provided by other midwifery service providers, including population workers, HIV/STI clinics, and obstetricians dealing with complicated cases beyond the scope of work or qualifications of midwives.

### *3.1.1. Assessment of need for midwifery services*

Chapter 3 starts with a section assessing the need for 46 essential midwifery services, following the methodology used by the SoWMy 2014 report. The SoWMy report contains a list of the 46 services, and the methods used for estimating need. For example, counselling on family planning is a need for all women of reproductive age, and it is roughly estimated that these women need one visit per year for counselling services on this issue. Thus, the number of contacts for this essential midwifery service is estimated as the number of women of reproductive age. For each of the 46 essential services, estimates were made using Vietnamese-specific data if possible, and if not then regional or SoWMy-recommended estimation coefficients were used. The sources of data for making these need assessments are provided in Annex 3.

The needs for specific contacts with midwifery services must be translated into midwifery workforce hours or days of work. For this report, the authors relied on a 2013 draft document called "OneHealth Model Intervention Treatment Assumptions" [22]. It provides some rough rules of thumb for estimating how much time and which health workers should be involved in performing most of the 46 essential interventions. However, some of the assumptions did not fit with the Vietnamese context, so they were adjusted. These adjustments are listed explicitly in Annex 3 of this report.

While this approach gives a rough estimate of the need for a midwifery workforce, it relies on a very large number of assumptions, many of which may be relatively less correct. It also relies on information about rates of illness, which may not be up-to-date, or may not be available for the Vietnamese context. This includes, for example, rates of unsafe abortion, or rates of breech birth.

The results of applying this method are provided in the Need section of Chapter 3 as a way to illustrate that, while obstetricians, medical technicians, and family planning workers are essential components of a midwifery workforce, the bulk of the work of providing the 46 essential midwifery interventions could be provided by well-trained and well-supported midwives. However, it must be acknowledged that at present the bulk of the Vietnamese midwifery workforce, with only secondary-level midwife training, may lack many of the competencies needed to fulfil their potential.

To achieve universal access to SRMNH care in Viet Nam, it is estimated that midwifery services must respond to about two million pregnancies per annum by 2030.[8] The health system implications include how best to configure and equitably deploy the SRMNH workforce to cover at least 8 million antenatal visits and 6 million post-partum and post-natal visits in 2019, at the peak of

8 *Based on projected number of children under 1 year of age in 2030 times a coefficient equivalent to the ratio of pregnancies in 2014 to children under 1 year of age from 2015 based on reported statistics. This assumes that the ratio of pregnancies to children will remain unchanged throughout this period.*

projected number of births, and 13 million post-partum and post-natal visits (Table 5). It should be noted that the ranges provided here are due to different data sources. The lower estimates are based on survey data of General Statistics Office (GSO) while the higher estimates are based on the MCHD routine statistical reporting estimates.

**Table 5: Summary of estimated episodes of midwifery care in 2015**

| | |
|---|---|
| **Pre-pregnancy (all WRA)** | **24 million family planning visits** |
| **Antenatal (pregnancies X 4 visits)** | **8.4 to 9.2 million routine visits** |
| **Birth** | **1.4 to 1.7 million skilled birth attendance** |
| **Postpartum (births X 4 visits)** | **5.6 to 6.8 million routine visits** |

*Source: Estimates based on methodology discussed in Annex 3, which is based on the SoWMy 2014 methodology.*

### *3.1.2. Core indicators*

Four core indicators underlie estimates of the need for midwifery services. These are: the number of women of reproductive age, the number of women giving birth, the number of pregnant women, and the number of newborns. The two sources of data used for this report, the GSO survey-based figures and the MCHD statistical report-based figures [23], yield substantially different estimates of these core indicators. This means that there is a substantial degree of uncertainty in these core indicators, and in all estimates of the need for essential midwifery interventions in Viet Nam.

Estimating the **number of women of reproductive age (WRA)** can be done by directly adding up the number of women in each age group between 15 and 49 as reported in the Census, the Intercensal Population and Housing Survey or the annual Survey of Population Change and Family Planning. In addition, population forecasts are available by age group for the period 2014-2049 [2]. This indicator forms the basis for most pre-pregnancy indicators of need, such as for family planning and STI/RTI diagnosis and treatment. The population surveys estimate 25 million WRA in 2014 [24], declining to 24 million in 2015 [1], and projections are for 25 million WRA from 2016 to 2030 [2], with little variation in the numbers over time.

The number of **women giving birth** (i.e. the number of births) in a 12-month reference period is available from both the population survey [1] and the MCHD statistical reports. In 2015, the survey reported 1.4 million women gave birth while the MCHD statistics system reported 1.7 million women giving birth. **It is not clear why there is a 300,000 person discrepancy between these two sources.** It cannot be explained by differences in how the two data sources treat stillbirths, since these only amounted to less than 15,000 in 2015. Survey undercount is a possibility, as GSO samples in the past have left out unregistered migrants [25]. However, it is also possible that the MCHD

statistics represent some duplication of reports, as information on women and newborns is gathered from several networks, and women may be seeking care at more than one facility, resulting in duplicate records.

The number of **pregnancies** is not tabulated in the annual population surveys but is reported by the MCHD statistical reporting system. In the MCHD statistics, it is not clear when the pregnancy is counted, or if pregnancies ending in miscarriage or abortion are included in these statistics. Pregnancy incidence can be estimated by taking reported live births (women giving birth) and adjusting for miscarriage and abortion [26] (Table 6).

The number of abortions in Viet Nam was reported by the MCHD to be nearly 270,000 cases in 2015. The survey estimate of abortions was only about 68,000 cases, a severe undercount due largely to the survey design that did not ask unmarried women about abortion, but also due to the sensitivity of the question, which may lead women to underreport abortions [1]. However, the number of MCHD-reported abortions exclude those performed in the private sector. The 2016 Study on the Quality of Family Planning Services in Viet Nam [27] provides an estimate of the proportion of abortions occurring in the private sector at 24.5%, which allows an estimation of 88,952 abortions conducted in the private sector in 2015. It is not known how many unsafe abortions occurred, although the wide availability of abortion services to women and the growing attention to quality of care suggests Viet Nam faces low risk of illegal unsafe abortion.

The number of **miscarriages** is estimated to be approximately 20% of the number of births and 10% of the number of induced abortions (which are assumed to be treatment for retained tissues after miscarriage) [26]. The number of miscarriages was thus estimated between 322,000 and 370,000 in 2015, depending on whether estimates of women giving birth are taken from the survey or from the MCHD statistics. Estimates of total pregnancies consequently range from 2.1 million to 2.4 million.

**Table 6: Estimating pregnancy incidence from reported number of women giving birth, 2015**

| | Survey | MCHD reports | Comments |
|---|---|---|---|
| Women giving birth in past 12 months | 1.433.827 | 1.672.625 | Reported |
| Reported Abortions | 67.562* | 266.857 | Survey only asks married women about abortion and the result is a severe undercount. MCHD reports do not include private sector facilities, so this is also an undercount. |
| Estimate of private sector abortions | | 88.952 | Family planning quality survey 2016 [27] |
| Estimate of miscarriages | 322. 346 | 370.106 | 20% of births + 10% of abortions [26] |
| Total pregnancies | 2.111.892 | 2.398.540 | Sum of births plus abortion rate taken from MCHD report + miscarriages |
| Reported pregnancies | | 2.395.372 | Comparison for checking |

*Note: *The MCHD reported abortions replace the severe undercount of abortions from the GSO survey.*

The indicator of **live births (i.e. children born alive)** is available in both the survey and the MCHD reports. However, in the 2015 GSO survey report, this indicator was not tabulated. Nevertheless, the figure can be estimated by taking the crude birth rate (16.2 live births per 1000 population in 2015) multiplied by the population size and divided by 1000 [1]. Thus, in 2015, the estimate from the survey for the total of live births is 1.5 million, compared to the MCHD report of 1.7 million live births. It is not known why there is a 200,000 person discrepancy between these two sources. The difference between the number of women giving birth and the number of children born is related to the number of stillbirths and multiple births. It is estimated that in Viet Nam 10.1 children are stillborn for every 1000 births [28], resulting in a loss of between 15 and 17 thousand children to stillbirth in a given year. The rate of twinning for Viet Nam is estimated at 6.2 per 1000 births [29]. Multiplying this figure times the number of women giving birth gives an estimate of about 9,000 twin births according to the survey, and 10,000 according to MCHD-reported births. Working backward from live births, adding in stillbirths and subtracting one of the twins in a twin birth, another estimate of the number of women giving birth was generated, as shown in the last row of Table 7.

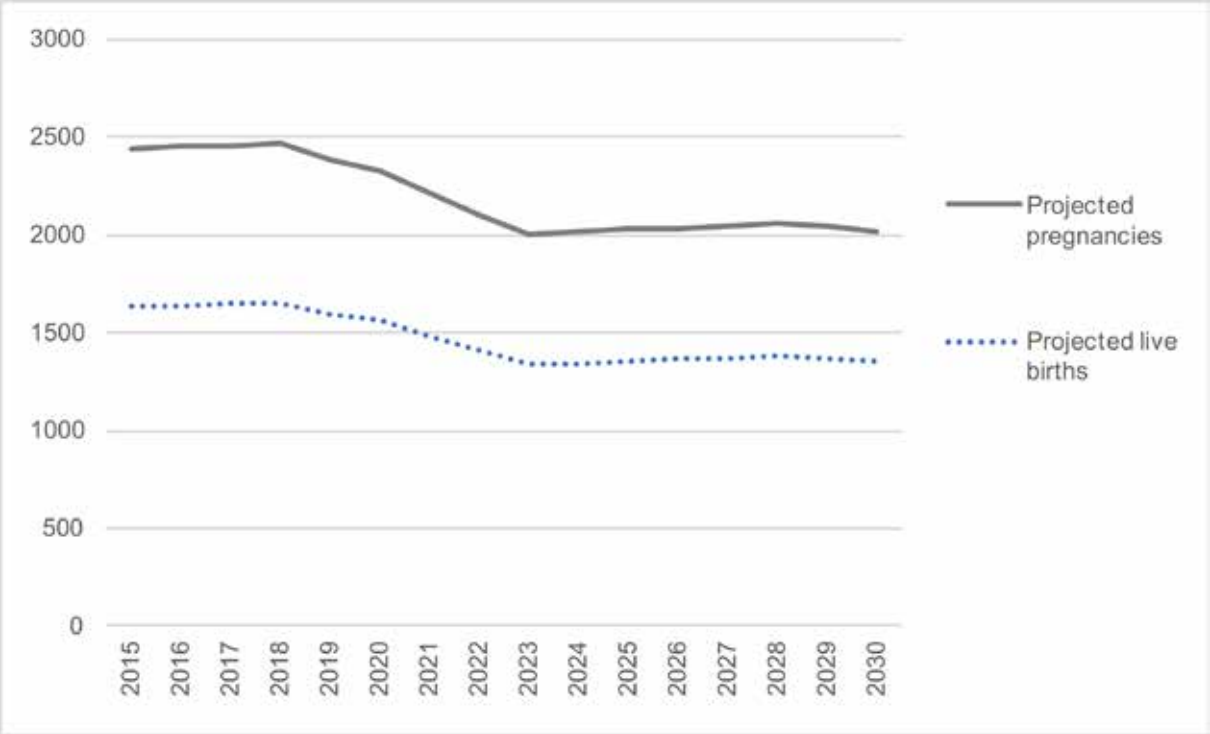
**Table 7: Estimate of children born and relation to number of births, 2015**

| | Survey | MCHD report | Source |
|---|---|---|---|
| Live births | 1.481.745 | 1.673.758 | Survey estimate based on CBR x population/1000 |
| Stillbirths | 14.571 | 16.998 | Viet Nam estimate of stillbirths is 10.1/1000 births [28] |
| Twin births | 8.890 | 10.370 | Viet Nam estimate is 6.2 twins per 1000 births [29] |
| Back estimate of women giving birth | 1.487.426 | 1.680.386 | Children born alive + stillbirths + one of each set of twins |
| *Reported women giving birth* | *1.433.827* | *1.672.625* | *From previous table for comparison* |

*Note: CBR=crude birth rate.*

To obtain a rough forecast of these key indicators of midwifery service need over time, it was assumed that there is a relatively fixed relationship between the number of live births, women giving birth, and pregnancies, and the number of children under one year of age in the following year. The GSO medium variant projection was used. Under this variant, the projected number of children under one year of age falls steadily until about 2023, then stabilizes, a pattern reflected in forecasts of the number of pregnancies and live births (Figure 11). However, alternative scenarios could be projected: for example, if unwanted pregnancy could be reduced more, or if social mobilization of condoms and contraceptive pills is not successful at maintaining replacement fertility.

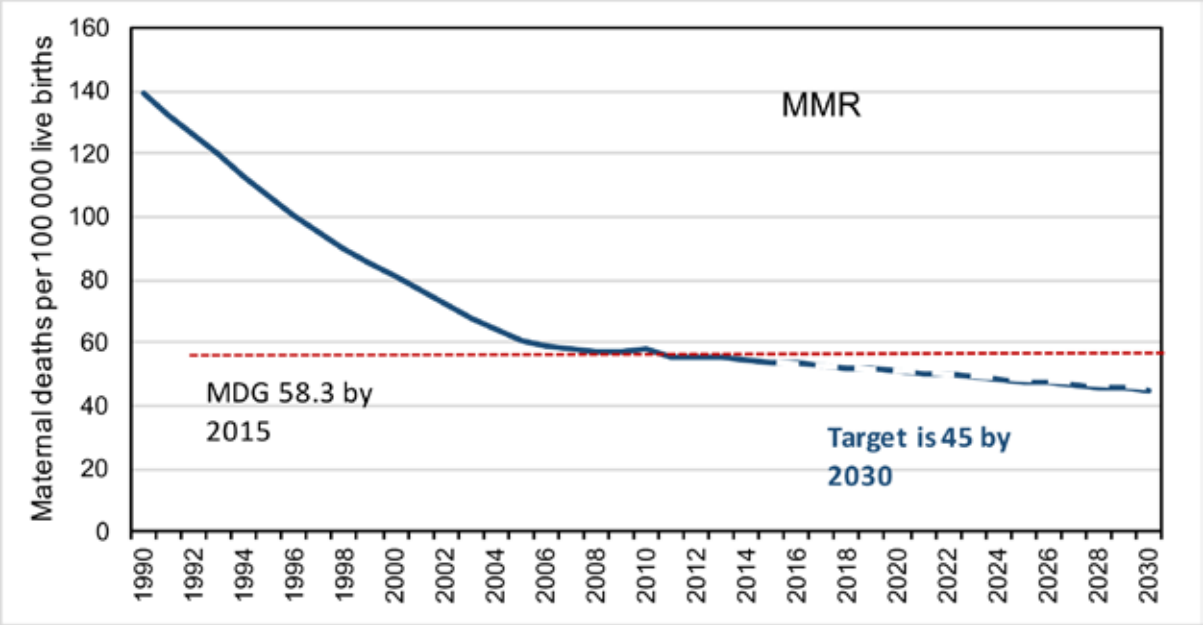
**Figure 11: Projections of pregnancies and births in Viet Nam, 2015-2030 (unit: 1000)**




*Source: Author's calculations using GSO Population Projections 2014-2049 [2]*

The above projection in some ways assumes that midwifery service needs do not intensify over time. However, Viet Nam's 2030 goal for reducing the maternal mortality ratio to 45 (Figure 12) will require greater effort in order to further reduce maternal deaths over the next 14 years and achieve the SDG on maternal mortality. This means increased efforts at prevention, detection of risk factors, and preparedness to respond to OB emergencies, all of which are core competencies and tasks of well-trained midwives.

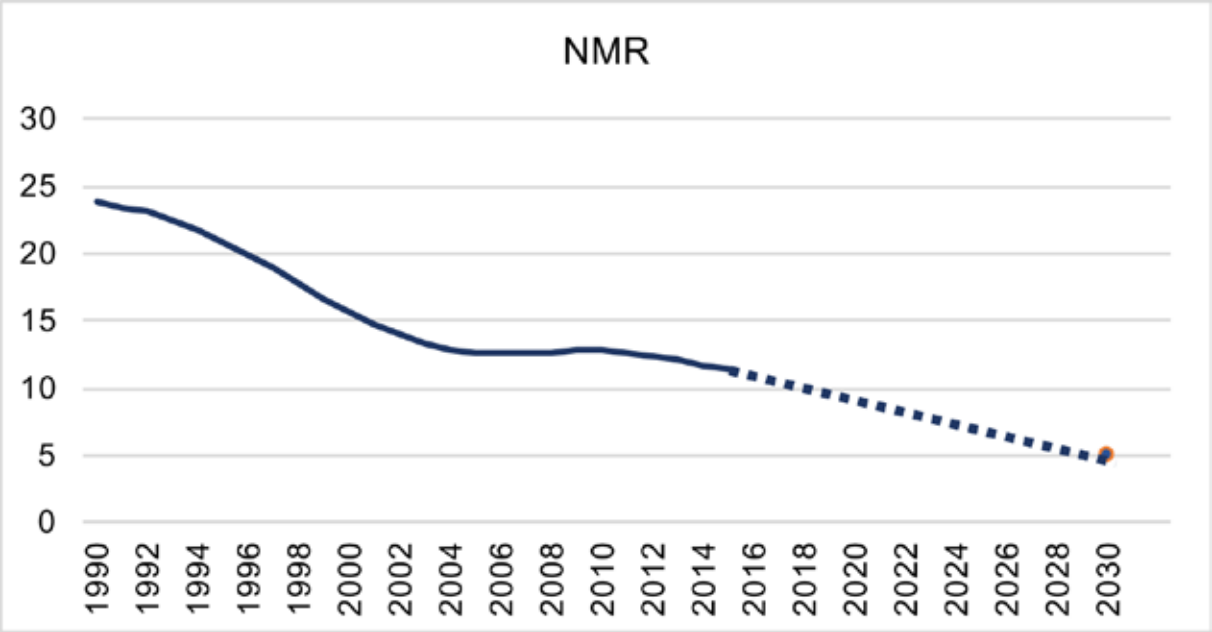
**Figure 12: Ambitious goal to increase the pace of maternal mortality reduction in Viet Nam by 2030**




*Source: data provided by MCHD/MOH based on draft Vietnamese SDG Statistical Indicators*

Continuing to reduce neonatal mortality to 5 deaths per 1000 live births will also require greater effort (Figure 13). Many preventive measures remain that can be undertaken to reduce neural tube defects and other birth defects, neonatal infection, birth asphyxia, and pre-term birth through interventions that are within the scope of midwifery, and for those cases that are not prevented, specialist neonatal intensive care units (NICUs) are increasingly available at the district level, although at substantially higher cost than preventive measures that midwives can undertake or promote.

**Figure 13: Continued steady reductions in neonatal mortality rate in Viet Nam by 2030**




*Source: UN Inter-agency Group for Child Mortality Estimation (IGME) in 2015 [10]*

### *3.1.3. Pre-pregnancy needs*

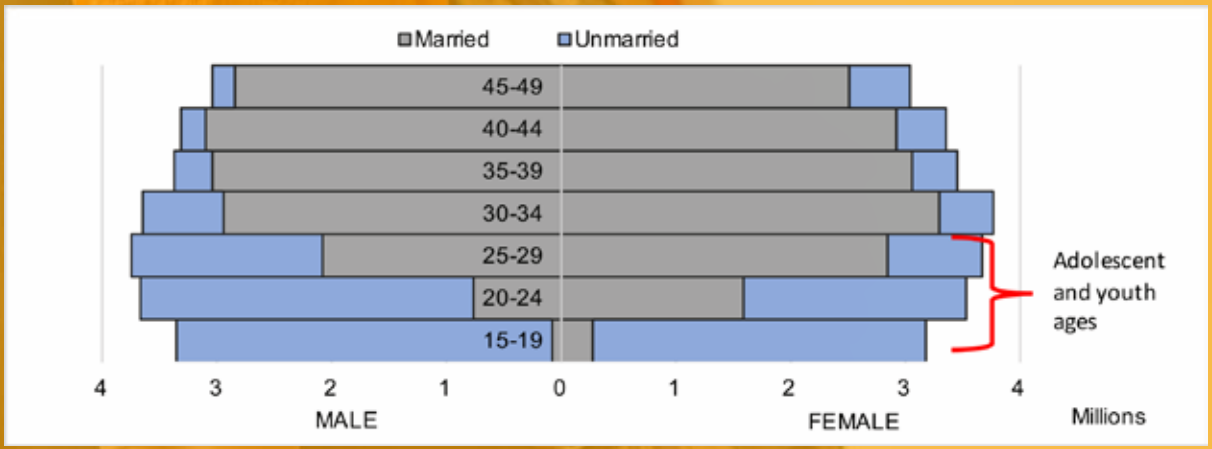
**Family planning advice and service delivery**

Family planning advice and delivery of family planning methods constitute a core part of women's reproductive health needs. In the Vietnamese health care system, family planning counselling for married couples is performed by a network of nearly 170,000 population workers, each working with an average of 77 couples to implement family planning [30]. Service delivery for condoms and pills is being shifted to the market, including via pharmacies and social marketing organizations. The MOH estimates that among couples receiving counselling from population workers, about 12.5% to 25% received free condoms in 2011 [30], while the rest were expected to buy them in the market. Hormonal methods of contraception (contraceptive pills, injections and implants) and IUD use should involve interaction between the woman and a health worker to verify that the client is not pregnant, to identify possible contraindications for use in individual cases, and for administration, although contraceptive pills may also be obtained from population workers or pharmacies. Though unclear, it does not seem that the current system requires a medical doctor to prescribe use of these contraceptive methods, nor to be involved in administration. IUD insertion and removal are categorized as the easiest class of medical procedures (50/2015/TT-BYT). Junior college midwives have appropriate training to perform these tasks. Secondary midwives, accounting for 94% of all midwives, have historically been an important workforce providing IUD insertion services, although Circular 26 prohibits secondary (and junior college) midwives from providing clinical family planning services or abortions since November 2015.

Female sterilization is classified as a type II surgery in Viet Nam, requiring six medical personnel to be involved (50/2015/TT-BYT). The role of midwives in providing sterilization services is unclear, since assistance in OB surgeries in Viet Nam is usually performed by a nurse.

While all women in reproductive age can be considered to need family planning counselling services, to estimate the need for contraceptive service delivery requires also an understanding of the overall number of women who want or need to use contraception (contraceptive prevalence rate + unmet need) and the current method mix, which is assumed to be based on preferences rather than availability. Unfortunately, contraceptive prevalence rates in Viet Nam are based on statistics for married women, rather than all women, even though unmarried women account for 31% of women (and 38.5% of men) in reproductive ages, particularly in younger age groups (Figure 14). Unmarried women of reproductive age are likely to require other sexual and reproductive health services including contraception and STI/RTI services. While efforts are being made to ensure provision of youth-friendly services so that the contraceptive (and safe sex) needs of unmarried people are met, coverage is incomplete [20], and information is unavailable to understand current service delivery and unmet needs. For analysis in this section the contraceptive prevalence and unmet need rates of married women were applied to the entire population of women of reproductive age (following the SoWMy assumptions) to obtain an overall estimate of need in the population.

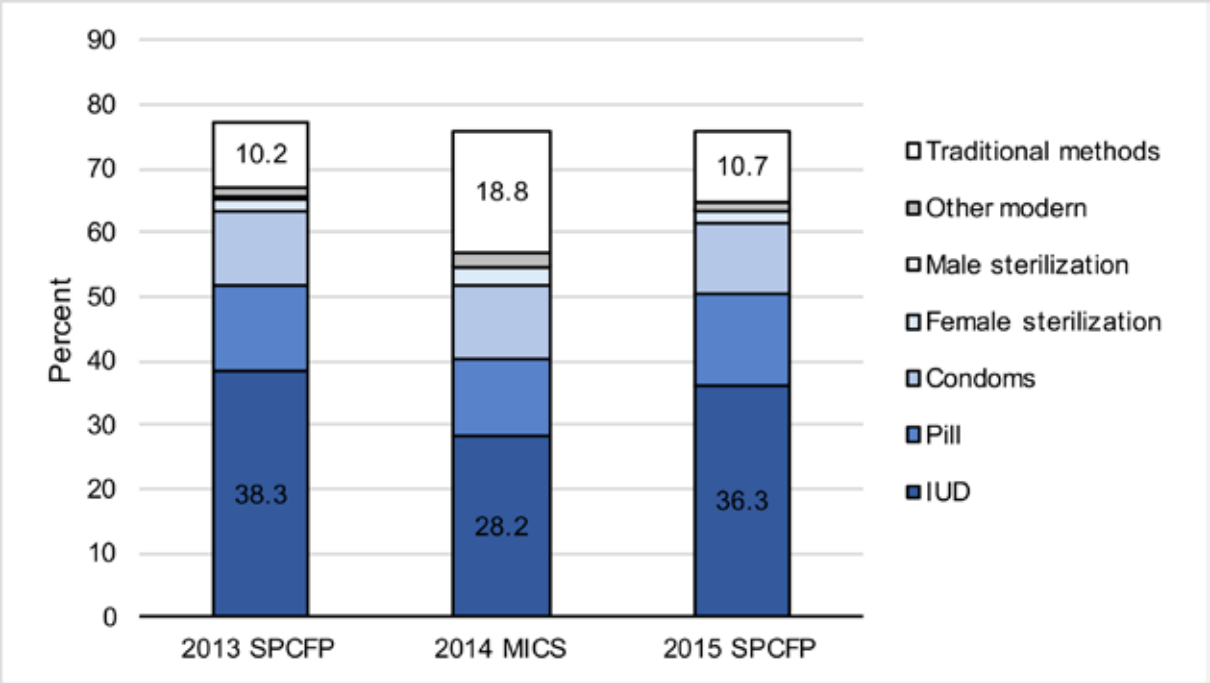
**Figure 14: Potential need for reproductive health services for all people aged 15 to 49 by marital status in Viet Nam, 2015**




*Source: Survey of Population Change and Family Planning 1/4/2015*

In 2014, the contraceptive prevalence rate was 75.7%, and the unmet need measured at 6.1% (MICS), leading to an estimated need of about 81.8% among WRA. Most married women using contraception in Viet Nam are using modern methods such as condoms, the pill or IUD, with a smaller share using traditional methods. The contraceptive mix appears to be evolving, though recent survey results provide inconsistent pictures of the contraception mix (Figure 15). The Survey of Population Change and Family Planning indicates a higher share of women relying on IUDs, while the MICS survey indicates a lower IUD use compensated by higher use of traditional methods. For the analysis in this section, the MICS data was used because it provides an estimate of unmet need of family planning services.

**Figure 15: Variation in contraceptive mix in Viet Nam as reported in three surveys, 2013-2015**

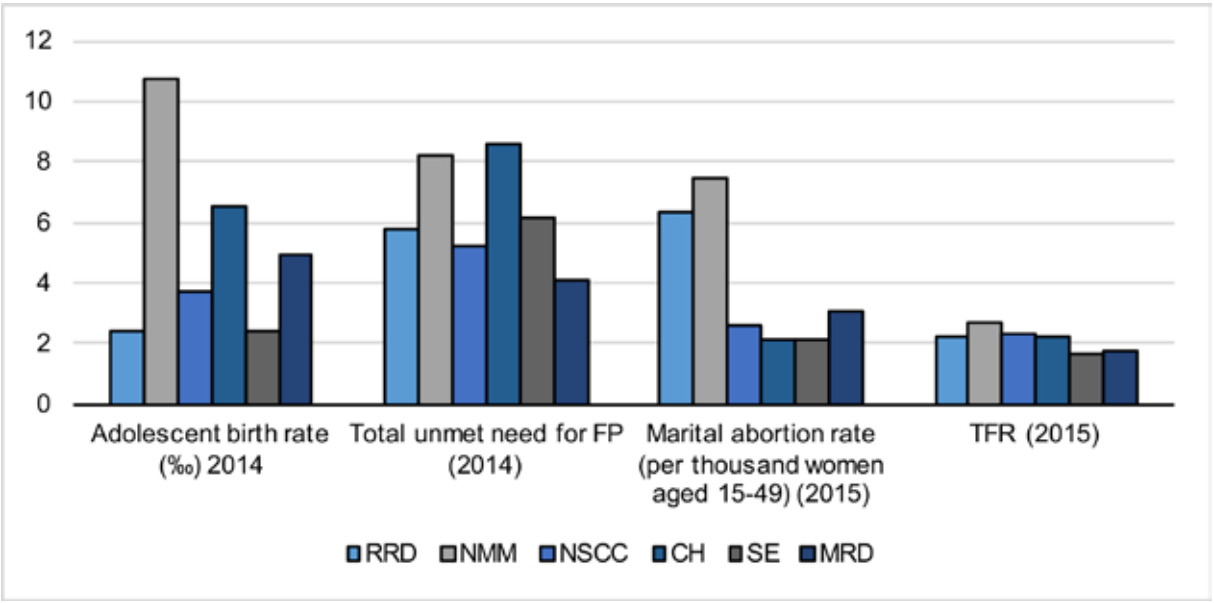



*Source: GSO, Survey of Population Change and Family Planning 1/4/2013; GSO, Viet Nam Multiple Indicator Cluster Survey 2014; GSO Survey of Population Change and Family Planning 1/4/2015.*

While the national TFR has remained stable and close to replacement level, some regional variation remains in TFRs and other key fertility-related indicators (Figure 16). While two southern regions have fertility rates below replacement level (the Southeast and Mekong River Delta), the remaining four regions have fertility rates above replacement levels, reaching 2.69 for the Northern Midlands and Mountains region. Adolescent birth rates are particularly high in the Northern Midlands and Mountains region, and in the Central Highlands. Unmet need for family planning services are also high in these regions. This suggests an important need that should be targeted in efforts to discourage early childbearing and to ensure availability of contraceptives for women in these two disadvantaged regions. VBAs may be a key service provider for this service in the disadvantaged areas where they work.

Another unmet need is revealed by the higher abortion rates among married women in the Red River Delta and the Northern Midlands and Mountains regions. Abortion should not be needed if contraception is used effectively, so efforts are needed to ensure that women's contraceptive needs are met and that they are using contraception effectively in these high-abortion regions. However, the significant regional difference in abortion rates may reflect the strong son preference, particularly in northern regions, so other interventions are required to change deep-held cultural beliefs that lead to an imbalance in the sex ratio at birth [31]. It is not clear what role midwives, VBAs, and population workers will play to reduce son preference.

**Figure 16: Regional differentials in adolescent birth rate, unmet need for family planning, marital abortion rate, and total fertility rate in Viet Nam, 2014 or 2015**




*Note: RRD=Red River Delta; NMM=Northern Midlands and Mountains; NSCC=North and South Central Coast; CH=Central Highlands; SE=Southeast; MRD=Mekong River Delta*

*Sources: 2014 MICS, 2015 Survey of Population Change and Family Planning 1/4/2015.*

Recent data from a study exploring barriers to ethnic minority access to maternal health and family planning services indicated large variation in utilization of contraception between different ethnic groups living in remote areas, with the contraceptive prevalence rate ranging from 50.5% for the BaNa group up to 82.3% for the Tay, and the modern contraceptive prevalence ranging from 41.1% among the BaNa to 73.7% among the Sedang (Table 8).

The contraceptive method mix varies substantially between groups, although these percentages are based on small samples and may reflect clustering in the sample design, since women in the same area are likely to be using similar forms of contraception. These differences suggest an important variation in the level of need for effective family planning counselling and service delivery, and suggest that efforts to address this need be sensitive to the concerns and cultural differences between different ethnic groups.

## Table 8: Contraception prevalence and contraceptive mix (%) in Viet Nam, by ethnicity

| | Tay | Gia Rai | Mnong | Thai | Ha Nhi | Dao | Sedang | Ba Na | Hmong |
|---|---|---|---|---|---|---|---|---|---|
| Contraceptive prevalence | | Gia Rai | 80.1 | 75.6 | 64.7 | 73.2 | 78.6 | 50.5 | 65.3 |
| Modern method prevalence | | Mnong | 61.0 | 54.9 | 50.0 | 63.4 | 73.7 | 41.1 | 50.4 |
| Type of contraceptive method | | Thai | | | | | | | |
| Female sterilization | | Ha Nhi | 2.2 | 0.3 | 0.0 | 0.9 | 0.0 | 0.3 | 0.1 |
| IUD | | Dao | 5.1 | 25.8 | 24.5 | 11.5 | 1.0 | 1.6 | 31.5 |
| Injectables | | Sedang | 23.5 | 0.9 | 12.7 | 22.6 | 35.2 | 16.2 | 8.2 |
| Implants | | Ba Na | 1.5 | 0.0 | 0.0 | 0.0 | 1.0 | 1.3 | 0.1 |
| Pill | | Hmong | 27.9 | 22.1 | 11.8 | 22.7 | 35.5 | 19.1 | 9.4 |
| Male condom | | 1.8 | 0.7 | 6.0 | 1.8 | 0.9 | 0.8 | 1.9 | 0.3 |
| Lactational amenorrhea | 8.5 | 10.5 | 10.3 | 17.0 | 14.7 | 9.8 | 4.8 | 0.3 | 0.8 |
| Periodic abstinence | 0.7 | 0.0 | 2.9 | 1.9 | 0.0 | 0.0 | 0.0 | 2.9 | 12.5 |
| Withdrawal | 2.1 | 9.6 | 5.9 | 1.6 | 0.0 | 0.0 | 0.0 | 1.0 | 0.1 |
| N (sample size) | 155 | 176 | 168 | 1087 | 171 | 336 | 407 | 447 | 1283 |

*Source: MOH-UNFPA. 2016. National survey on Exploring barriers to accessing Maternal health and family planning services in ethnic minority communities in Viet Nam [32]*

**Sexually transmitted infections (STI) and HIV services**

STIs may result in severe health consequences, particularly for women [33], and may assist in transmission of HIV [34]. Viet Nam has a high prevalence of curable STIs among high risk groups (20-30%) and it is not uncommon in the general population [35]. However, this may be an underestimation because of the common practice of self-medication, receiving medication from drug sellers, or not seeking treatment at all [36]. There is a culture of not discussing sexuality, which may lead to misconceptions about RTIs/STIs- a challenge that could be addressed through promotion of health education [36].

It is estimated that in 2015 there were 63,739 women aged 15 and older living with HIV in Viet Nam [37]. In 2015, 752,286 people (male and female) underwent voluntary HIV testing and counselling [38]. About one-third of new infections are among women, and 50.8% are known to be sexually transmitted [38]. With an estimated 12-14 thousand new cases of HIV infection each year, this means there were about 4,600 new adult female cases in 2015. Women are at considerable risk of HIV transmission due to lack of testing, ignorance of risks, and unprotected sexual encounters [39]. It is estimated that 53% of adults living with HIV/AIDS are in need of antiretroviral (ARV) drug treatment [37]. The unmet need for ARV is high, with one estimate in a high prevalence population, for instance, at around 40% of women living with HIV [40].

In the Vietnamese system, STI prevention and control, including HIV, is part of a reproductive service package that is now being offered through several different government providers (MOH Decision 2295/QĐ-BYT in 2016). These include provincial reproductive health centres and district health centre reproductive health departments, provincial HIV/AIDS centres, and the network of voluntary testing and counselling centres, along with ARV treatment centres, provincial dermatology or social disease prevention and treatment centres, and the commune health stations. Most of these providers rely on medical doctors for diagnosis and prescription of treatment along with laboratory technicians to perform relevant lab tests. For non-pregnant women, midwives currently play a minimal role in STI prevention, screening, or treatment, and are only allowed to administer drugs, not to prescribe them. STIs among sex workers in Viet Nam has been researched more extensively, but the role of midwives in care for this client group is not clear. In general, midwives in Viet Nam demonstrate higher levels of STI knowledge and practice than other surveyed health care providers [36].

**Folic acid supplementation**

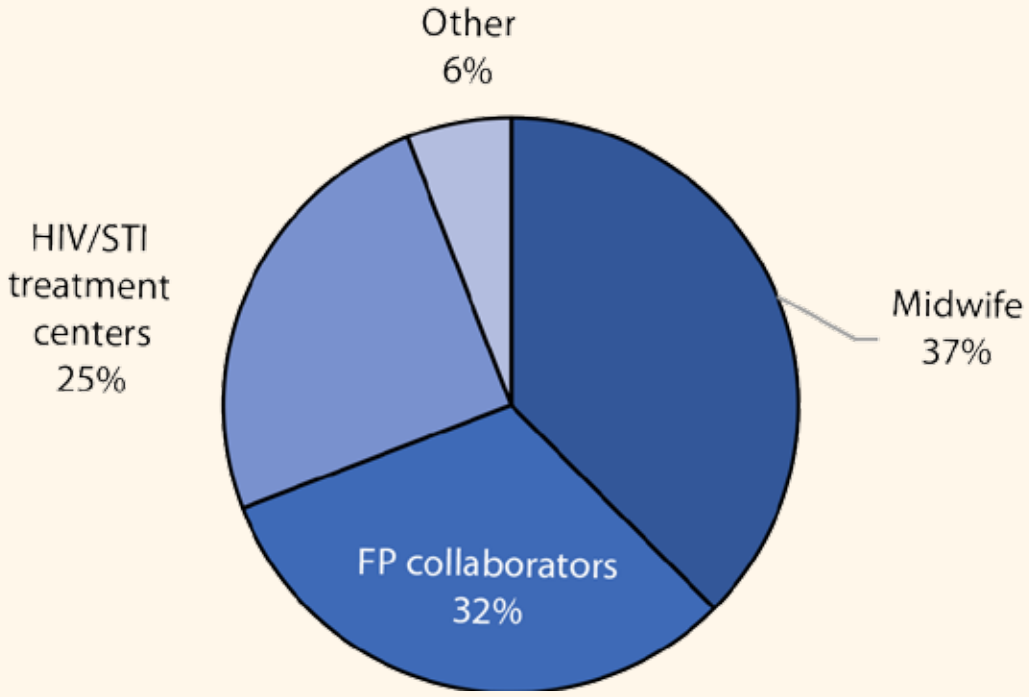
Epidemiological evidence indicates folate deficiency leads to increased likelihood of pregnancy complicated by neural tube defects and other birth defects. Folate levels can be enhanced by consuming foods rich in folate, or by ingesting folic acid through dietary supplements (multivitamins) or fortified foods. In many countries folic acid supplementation is recommended prior to conception [41,42]. Viet Nam has begun to introduce folic acid supplementation into fish sauce [43], and has standards for its supplementation in flour. The World Health Organization (WHO) recommends folic acid supplementation in countries with anaemia levels greater than 20% [44]. While available estimates of anaemia in women of reproductive age in Viet Nam are below that threshold nationally [43], this report does not include additional personnel for this purpose in our estimates of need for the 46 essential midwifery services, although it may be warranted for sub-groups of the population with higher rates of anaemia.

**Summary of pre-pregnancy midwifery needs**

Based on the analysis following the SoWMy methodology applied to the Vietnamese health system, the need for midwives and other health personnel to provide pre-pregnancy essential midwifery interventions is summarized

below. These estimates of full-time equivalent (FTE) workers assume that family planning **counselling** is largely provided by population workers, that **distribution** of family planning services is provided by a combination of population workers, midwives, and other providers (for female sterilization), and that **STI/HIV prevention, counselling, screening, and treatment** of non-pregnant women are tasks largely dealt with by the network of facilities coordinating this type of care according to MOH Decision 2295/QD-BYT. Folic acid supplementation for menstruating women is not provided in Viet Nam as anaemia does not reach the 20% threshold to recommend such a program. Figure 17 shows that midwives do not play a dominant role in pre-pregnancy midwifery intervention service provision. This reflects the large separate networks of HIV/STI and family planning services that currently exist in Viet Nam. But it also seems to be reflected in midwifery student's view of their roles in reproductive health, which is focused largely on assisting in childbirth, and is not related to reducing abortions or STIs [45]. The vast majority of midwife time for pre-pregnancy care is spent on providing the clinical and hormonal forms of birth control.

**Figure 17: Structure of need for providers of pre-pregnancy essential midwifery services in Viet Nam, 2015 (FTE)**




*Note: Pre-pregnancy services include family planning counselling, family planning delivery, and screening and treatment of STIs including HIV and folic acid supplementation of menstruating women.*

*Source: See Annex 3 for assumptions and data sources used for estimation.*

### *3.1.4. Pregnancy care*

Pregnancy care includes a range of services including those related to maintaining health of woman during pregnancy (malaria and STI/HIV prevention and control), other preventive interventions including folic acid administration and tetanus vaccination, and screening and prevention or management of complications during pregnancy (including hypertensive disorders, preterm rupture of membranes, preterm labour, or breech birth). In addition, the SoWMy methodology includes safe abortion in the set of services related to pregnancy. This is because it is considered a service for use when complications occur to the mother or child during pregnancy and termination of pregnancy is indicated. However, in Viet Nam, it is often considered as a treatment for failed contraception, and might fit better in the pre-pregnancy category of services. The core indicator underlying this needs assessment is the number of pregnancies. The number of pregnancies, from reported women giving birth, is estimated at somewhere between 2.0 and 2.3 million per year depending on whether the GSO survey or MCHD reports are used and adjustments are made for abortions and miscarriages. Reported births from the MCHD are even higher, at 2.4 million per year. The discrepancies in these figures have not been explained.

**Basic antenatal care**

The most basic pregnancy intervention is regular antenatal care consultations with a midwife or obstetrician. The current recommendation is four visits. During these visits, besides the basic history-taking and physical exam, additional essential midwifery interventions are also provided, depending on the woman's situation and needs. Survey data indicate that 88.8% of all women in Viet Nam reported that during their last pregnancy ending in a live birth in the past two years, they had at least one antenatal consultation with a medical doctor [6]. Some 30.6% of women reported that they received some antenatal care from a midwife or nurse, however, among those, 77% also received antenatal care from a medical doctor [6].[9] For purposes of this needs assessment, it was assumed that 60% of antenatal care visits could be provided by midwives and the remaining 40% by obstetricians, though this is simply an assumption that can be adjusted for estimation purposes or simulation; it is not based on any sense of optimal care or on any evidence of the current share of antenatal care managed by these two types of health workers.

**Micronutrient supplementation**

The WHO recommends daily oral iron and folic acid supplementation of elemental iron and folic acid for all pregnant women to prevent maternal anaemia (and the risk of death in case of postpartum haemorrhage) and the risk of puerperal sepsis, as well as to reduce the risk of low birthweight and preterm birth [46]. Several studies have measured anaemia rates in Viet Nam to show the need for iron supplementation [47–55]. Lack of prenatal care vitamins has been found to be a statistically significant risk factor for stillbirths in Viet Nam [56,57]. In populations with low dietary calcium intake, daily supplementation of calcium is recommended to reduce the risk of pre-eclampsia [46].

As with iron and folic acid supplementation prior to pregnancy, the health worker's role is primarily to advise the pregnant woman on the benefits of iron, folic acid, and calcium supplementation. Folic acid supplements are considered to be part of the antenatal care package (Circular 06/2009/TT-BYT), and the MICS 2014 data show that 94.7% of Kinh women and 74.2% of ethnic minority women have used folic acid and iron supplements during pregnancy [6]. Viet Nam's health system does not appear to systematically conduct finger prick haemoglobin tests for anaemia in pregnant women, nor does it deliver free calcium supplements.

9 *Author calculation from raw data indicates 30.6% of women reporting midwife-provided antenatal care, but of these, 77% also reported receiving antenatal care from a medical doctor.*

### Tetanus vaccination

Tetanus toxoid vaccination is recommended for all pregnant women, with two doses in the first pregnancy and boosters during subsequent pregnancies depending on the timing [46]. This helps to prevent neonatal mortality from tetanus. Tetanus vaccination has long been included in Viet Nam's antenatal care package as part of the expanded program on immunization funded through the state budget, and is generally delivered at commune health stations. Viet Nam has eliminated maternal and neonatal tetanus since 2006. The MICS 2015 indicates that 82.2% of women are protected against neonatal tetanus; 59.6% were given two doses of the vaccine during their last pregnancy, and the rest were vaccinated during previous pregnancies. The need for this intervention is estimated by counting two vaccination visits per pregnancy.

### Prevention and management of malaria

The World Malaria Report estimates that 7% of Viet Nam's population lives in areas with a high risk of malaria [58], and it is thus expected that 7% of pregnant women live in these areas where they face a high risk of being infected with malaria. Malaria is associated with anaemia in pregnancy and the associated risks of OB complication. In addition, malaria is a risk factor for low birthweight newborns. The main malaria-related interventions are distribution of insecticide-treated bed nets and treatment of malaria with antimalarials. Malaria prevention and treatment are implemented as part of the national health program through the commune health stations in malaria endemic areas. Because malaria treatment involves drug prescription, it is assumed that the diagnosis and treatment of malaria during pregnancy is the task of a doctor, while the distribution of bed nets and explanation of how to use them is the midwife task as part of early antenatal care.

### Smoking cessation

Smoking prevalence among women aged 15 and older remains relatively low, at only 1.4% in 2010 [59]. Professional smoking cessation therapy is not currently a task for which midwives are trained or assigned responsibility for in Viet Nam. However, WHO recommends that healthcare providers ask all pregnant women about past and present tobacco use and exposure to second-hand smoke as early as possible in pregnancy and at every antenatal care visit, to raise awareness of the potential harm to mother and foetus.

### Prevention, screening, and treatment/ management of STIs, including HIV, during pregnancy

A key part of prevention of STIs and HIV is information and education about how to prevent these diseases or to recognize symptoms and seek treatment early. The Viet Nam Administration of HIV/AIDS Control (VAAC) indicates in their 2015 report that one million women received communication and education about HIV, but it is not clear through which channels they were reached, nor what role midwives and other health workers have in informing pregnant women about HIV/AIDS [38].

Congenital syphilis is a severe, disabling, and often life-threatening infection that is spread to the infant through the placenta of an infected mother. HIV is a chronic incurable infectious disease that can also be spread to the infant during pregnancy. It is recommended that all pregnant women be screened for these two infections [46], preferably with laboratory confirmation before treatment. Viet Nam has implemented effective measures to manage its HIV epidemic, and with the current number of people living with HIV/AIDS at 0.25% of the population, it is considered a low-prevalence setting [38]. WHO recommends that in low-prevalence settings, provider-initiated testing and counselling for HIV should be considered as part of the routine package of services for PMTCT HIV/AIDS in all antenatal care settings. HIV testing should be integrated with syphilis testing [46]. Evidence to back up recommendations on antenatal screening for other STIs is weak, so diagnosis and treatment is only performed on

people with symptoms.

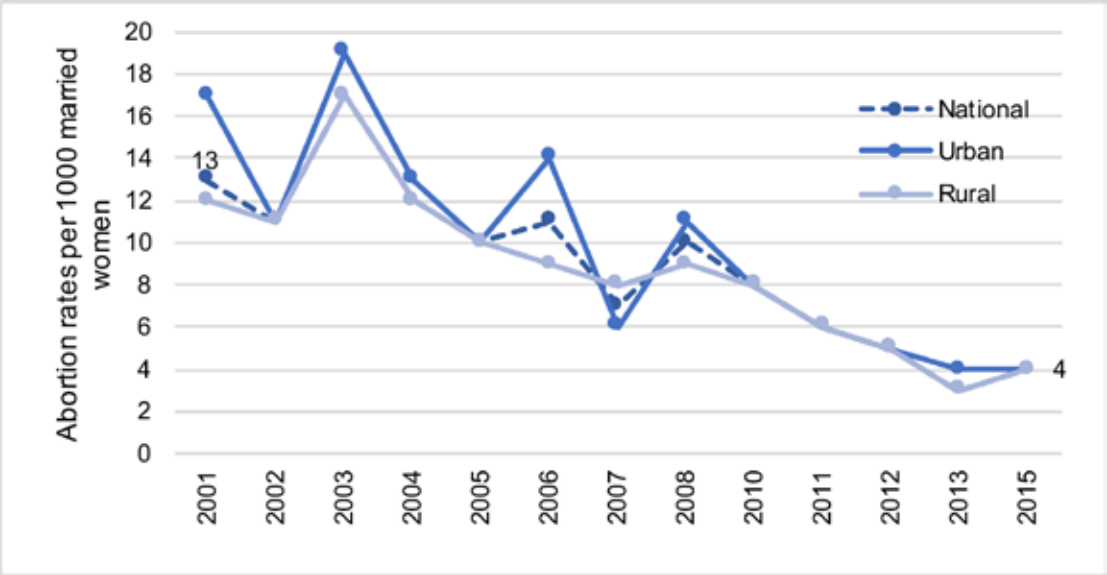
HIV screening in pregnant women is widely implemented in Viet Nam. According to MCHD reports in 2015, 517,466 pregnant women were tested prior to or during pregnancy, while 900,319 were tested during labour. VAAC reports a total of 1,129,000 pregnant women tested for HIV in the same year as part of the PMTCT strategy [38]. MCHD reports a total of 1,646 pregnant women living with HIV, most of whom were diagnosed during their pregnancy (73%). A total of 1,691 pregnant women were given ARV treatment to prevent transmission of HIV to the foetus, 673 of whom were on ARV treatment prior to pregnancy. Implementation of the interventions to prevent mother-to-child transmission of HIV have been well researched in Viet Nam [60–68]. Syphilis screening has been relatively neglected, with only 176,613 pregnant women tested in public facilities according to the MCHD statistical system.

Organization of screening and treatment follows MOH Decision 2295/QĐ-BYT in 2016 to integrate HIV and STI screening with reproductive health care, which may help to increase coverage of syphilis testing. Having a specialized system for screening, counselling, and treatment has some advantages in terms of increasing knowledge about the latest protocols and availability of appropriate lab tests and treatment medications. However, it maintains the fragmented system of care where each medical need is provided by different providers. The role of the midwife is primarily to advise and refer, rather than provide on-going care and counselling for these infections under treatment supervision of a medical doctor.

**Abortion care**

The abortion rate among married women in Viet Nam appears to have declined over time, falling from 13 per 1,000 married WRA in 2001 to 4 per 1,000 in 2015 [1]. This is likely a result of improvements in access to and use of effective contraception (Figure 18). Statistics from the MCHD indicate that the overall abortion rate is substantially higher, estimated at 11 per 1,000 women, including both married and unmarried women. This suggests that most abortions are occurring among unmarried women. Statistical surveys tend to avoid asking unmarried women sensitive questions about contraception and abortion (e.g., the MICS and Survey of Population Change and Family Planning Surveys), making it difficult to monitor reproductive health issues among the unmarried population.

**Figure 18: Abortion rates among married women in Viet Nam, 2001-2015**




*Note: Abortion rates are calculated as the number of abortions to married women aged 15-49 per 1,000 married women in this age group. The figure does not include unmarried individuals. The 2009 Census and 2014 Intercensal Demographic Survey did not report abortion statistics.*

*Source: GSO. Survey of Population Change and Family Planning 1/4/2015 [1].*

Recent rough estimates of the total abortion rate (TAR) indicate that 42 out of 100 women experienced at least one abortion in their reproductive life [27]. The data indicates that none of the married women indicated any abortions prior to marriage. The abortions reported by these women include those occurring at any time during their reproductive life, some of which occurred 10 or even 25 years prior to the survey, rather than the standard total abortion rate, which only take into account age-specific abortion rates for abortions occurring during the survey year. As a result, the figure for Viet Nam reflects historical abortion rates, rather than current abortion rates. An alternative measure is to take the current abortion rate per 1,000 women and multiple it by reproductive life (assumed to be 35 years). This gives an alternative estimate of TAR for married women of 0.14 (i.e. for every 100 women, 14 abortions have been experienced during their reproductive life if the abortion rate per 1,000 women remained constant at 2015 rates. In both cases, these rates do not provide a very useful measure of abortion because they do not include statistics on abortion among unmarried women.

MCHD statistics on abortion do indicate a much higher abortion rate; in 2015 their reports on abortion indicate about 11 abortions for every 1,000 women of reproductive age.[10] While this figure likely includes abortions among married and unmarried women, it is likely an underestimate as it does not include private facilities.

As mentioned above, the need for abortion services arises as a result of the unmet need for contraception, contraceptive failure, or medical conditions of the foetus or mother, although in northern Viet Nam son preference may also lead to illegal abortions of female foetuses. A low-end estimate indicates that at least 266,857 abortions were performed in 2015 in public facilities in Viet Nam, with no estimates of the number performed in private facilities, or the number of unsafe abortions. If the GSO and MCHD statistics are correct, this suggests that only one in four abortions are to married women. MCHD

10 *MCH reports 266,857 abortions among a population of 24 million WRA in the 2015 Survey of Population Change and Family Planning Results.*

statistics indicate that only 5,548 of the abortions performed in public facilities were to adolescents or youth. While demand for abortion services is likely to continue, the real need is for more effective prevention of unwanted pregnancy, an important pre-pregnancy midwifery service need discussed above. And for those making difficult choices, such as pregnant HIV-positive women, a very important intervention is the counselling provided to the woman; some would argue this is more than the abortion procedure itself [69].

Delays in seeking abortion have been noted as an important problem [70] since the further along the pregnancy is the more dangerous the procedures are and the more likely they are to cause complications. According to MCHD statistics, 77% of abortions were performed at a gestation period equal to seven weeks or less, while another 24% were performed at between 8-12 weeks gestation, and 3% during the second trimester. Factors found to influence delays in seeking abortion early include failure to recognize pregnancy, previous failed menstrual regulation [70], and the desire to know foetal sex before deciding [71]. There are substantial barriers to second trimester abortions, including greater bureaucratic requirements, negative abortion provider attitudes, and high cost. These factors may put women at risk of unsafe abortion provided in unlicensed private providers [72], which are more likely to lead to complications, with possible long-term effects such as infertility or death.

Early vacuum aspiration abortions below eight weeks are authorized for commune health stations, and medical abortions and suction abortions up to 13 weeks are allowed to be performed at the district and higher levels, while more complicated types can be obtained at provincial and higher-level facilities (Circular 43/2013/TT-BYT). Of course, facilities are only allowed to perform these services if they have the appropriately trained personnel, equipment, and medications available. Before 2015, secondary midwives were allowed to perform vacuum aspiration abortions under 8 weeks, but not medical abortions. Medical abortion safety and feasibility have been tested in Viet Nam [73–76], but the method is still not widely provided. However, Circular 26 (issued in 2015) stipulates that only university and higher-level midwives can provide abortion services, while only about 5% of all midwives nationally have this level of training [12]. A recent survey indicates that the two most preferred places for termination of the last pregnancy among women aged 15-49 are private/NGO-led clinics (24.7%) and district hospitals (23.9%), followed by commune health stations (20.8%), and provincial hospitals (12.6%). For termination of pregnancy, rural women rely more on district hospitals, while urban women use private clinics [27]. Regardless of place of residence and region, most abortions are conducted by obstetricians (60.0%), followed by midwives (14.4%) [27].

**Prevention of obstetric complications**

Many OB complications can be prevented or mitigated early, to reduce harm to mother and child, although most of these conditions and risk factors should be managed at a hospital where emergency caesarean section (C-section) can be performed if necessary and where higher-level and specialist services are available, such as those provided by paediatricians. This section describes some of the interventions used to reduce or mitigate OB complications prior to birth.

Hypertensive disorders during pregnancy can lead to pre-eclampsia and eclampsia. Calcium supplementation, smoking cessation, and antihypertensive drugs for pregnant women with elevated blood pressure can reduce the risk of pre-eclampsia and eclampsia during later stages of the pregnancy, and alleviate the need to induce labour prematurely to treat eclampsia.

Hypertension during pregnancy and pre-eclampsia (multisystem disease with signs that include high blood pressure and protein in the urine) can be easily and inexpensively screened during pregnancy and anti-hypertensive drugs dispensed to reduce the risk of eclampsia, a life-threatening OB complication. Good quality antenatal care involves regular monitoring of blood pressure

and test strips to check protein in the urine, and a general assessment to look for other signs of impending eclampsia (e.g., abdominal pain, visual disturbances) which would then identify the group in need of treatment in high-level services with MgSO¬4 (magnesium sulfate) and anti-hypertensive drug management, and possibly early delivery of the foetus [77]. Eclampsia is a major OB complication in which the hypertensive pregnant woman suffers convulsions, followed by coma, organ failure, and possible death to mother and foetus. Standard treatment in the case of eclampsia would be administration of anti-convulsants (MgSO¬4) and delivery of the foetus.

While no plausible estimates are available for prevalence of hypertensive disorders in pregnancy in Viet Nam,[11] regional estimates based on a review of the literature reporting on prevalence in different countries are available [78]. These estimates indicate incidence of chronic hypertension in pregnancy of 0.32%, pre-eclampsia of 2.43% and eclampsia of 0.14% in the Western Pacific region, and were used to make this estimates in this report. Well trained midwives closely monitoring blood pressure and managing hypertension can often identify these conditions early and refer women for higher level treatment before serious complications occur.

Preterm premature rupture of membranes may lead to spontaneous onset of labour within several days, but some women may not deliver for weeks, putting the foetus at risk of infection due to the compromised membrane that no longer provides a protective barrier. However, sometimes the woman may have had what is called a hind-water leak. These usually heal by themselves and women can be discharged home to continue the pregnancy till term. However, if the woman is losing a lot of fluid it is more likely that she will go on to commence labour. In this scenario, if the woman is between 24 weeks and 34 weeks and 6 days of gestation, it is ideal if labour can be delayed long enough to administer steroids (two doses 24 hours apart) to assist foetal lung development and reduce the risk of respiratory distress syndrome. Intrauterine infection and preterm labour are common complications of this condition, which is found in about 25% of preterm births [57,79,80]. Treatment of these conditions usually involves hospitalization, observation, treatment, and possible labour induction by an obstetrician. Preterm birth can lead to respiratory distress for the newborn and is a major risk factor for neonatal mortality [81]. Incidence of preterm birth in Viet Nam is estimated at 11.8% [79].

Malpresentation (usually breech) is estimated to occur in about 4.5% of all births, or less than 4% for term births, as it is strongly associated with preterm birth [82]. External cephalic version is a technique to aide in turning the foetus for a cephalic birth, and has been proven successful at reducing both C-section rates and breech vaginal births with rare risk of serious complications, although it is recommended that the procedure only be attempted in a facility that has capacity for performing a C-section, and to avoid implementing the procedure among women with certain risk factors. The junior college midwife curriculum indicates that obstetricians should perform this procedure, not midwives, but it is not clear that obstetricians actually perform this procedure in the Vietnamese system.

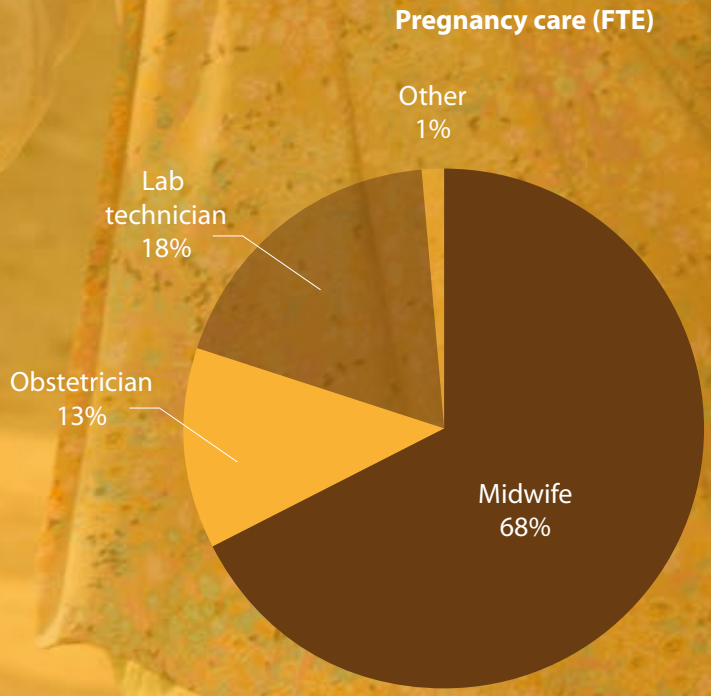
### Summary on midwifery needs during pregnancy

Based on the analysis following the SoWMy methodology applied to the Vietnamese health system, the need for midwives and other health personnel to provide essential pregnancy interventions is summarized below. The estimates assume that midwives perform most of routine antenatal care and early vacuum aspiration abortions, and assist the obstetrician in dealing with OB complications towards the end of pregnancy. It should be noted that for any tasks requiring prescription medications it is assumed a medical doctor will examine the patient and prescribe medications, while the midwives will administer the medications.

11 *The MCH statistical system reported only 456 cases of eclampsia in Viet Nam in 2015, a rate of 0.03% of births, the same rate as in Japan.*

Figure 19 shows that midwives do play a dominant role in pregnancy-related midwifery interventions in Viet Nam. Assumptions of widespread screening of pregnant women for STIs and HIV during antenatal care explains the high share of needs served by lab technicians. Obstetricians are assumed to provide antenatal care for 20% of pregnancies and provide the diagnosis and treatment plans for response to OB complications or their risk factors.

**Figure 19: Structure of need for providers of pregnancy essential midwifery services in Viet Nam, 2015**

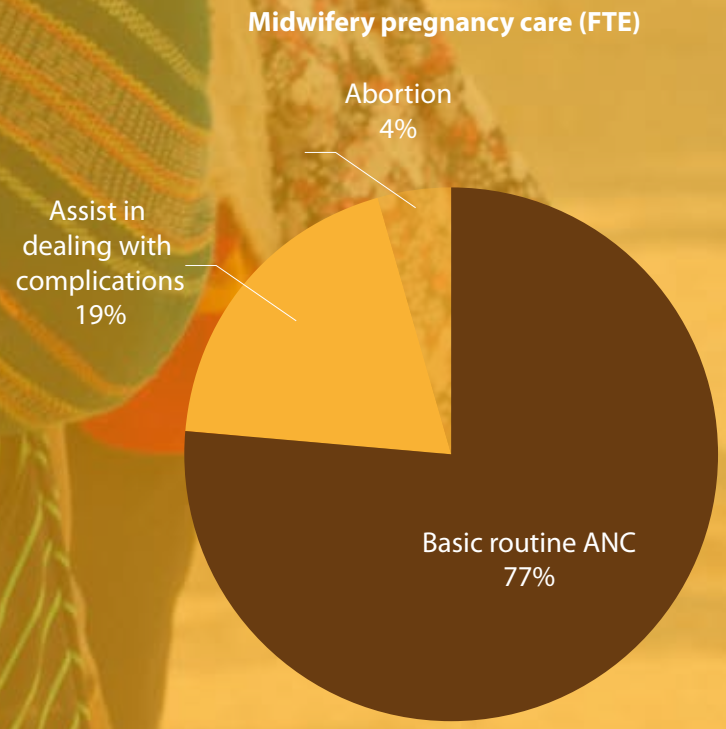



*Note: Pregnancy services include antenatal care (e.g., folic acid, malaria treatment, STI/HIV screening and treatment, management of hypertensive diseases), mitigation of complications arising near time of birth, and abortion services.*

*Source: See Annex 3 for assumptions and data sources used in estimation.*

The work that midwives perform during pregnancy care is largely the routine antenatal care for normal pregnancies, with about one-fifth of their time spent assisting obstetricians with complications (Figure 20). Abortions account for a small share, mainly because there are few of them compared to pregnancies.

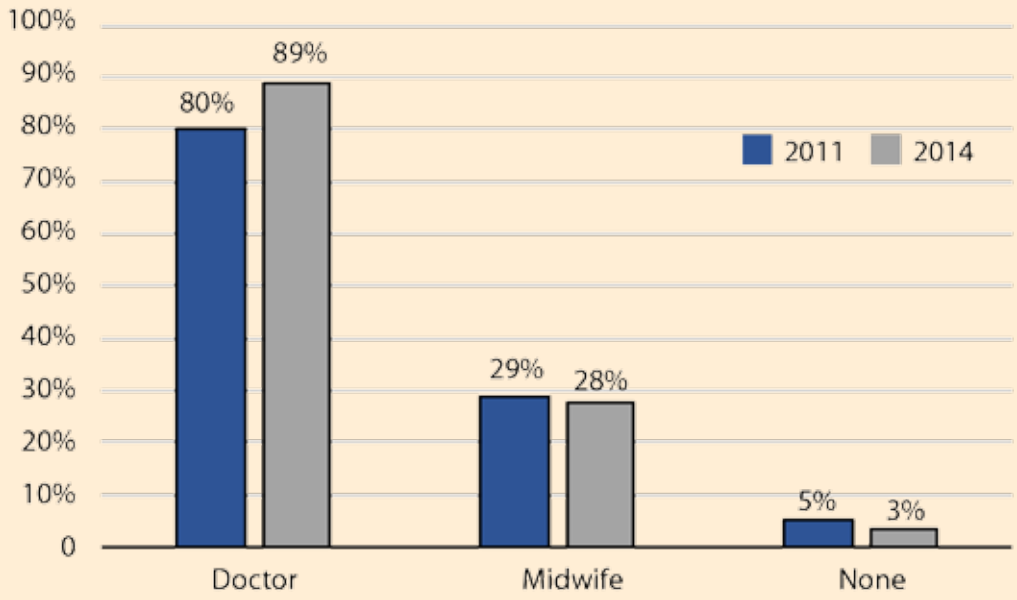
**Figure 20: Structure of pregnancy needs met by midwives in Viet Nam, 2015**




*Source: See Annex 3 for assumptions and data sources used in estimation.*

While antenatal care is a core function of midwives, in Viet Nam doctors seem to be the primary provider of antenatal care (Figure 21).[12] The continuity model of midwife-led care is a cost-effective model for providing antenatal care from the first visit through the postpartum period. It may be implemented by obstetricians too, but this would be a waste of a rare and more costly resource needed to deal with complications of pregnancy and childbirth.

**Figure 21: Who is providing antenatal care in Viet Nam?**




*Source: MICS 2011 [7], MICS 2014 [6]*

### *3.1.5. Childbirth*

The main indicator for childbirth interventions is the number of births, including stillbirths. According to the GSO Population Change and Family Planning Survey, the number of live births in 2015 was 1.5 million, while reports from the MCHD indicate 1.7 million births. It is not clear why there is a discrepancy of 200,000 infants. Stillbirths are estimated at 15,000 to 17,000 cases per year.

Essential interventions during childbirth include care provided during normal spontaneous vaginal birth and treatment of OB complications.

**Normal labour and birth**

Most pregnancies will end with normal vaginal birth. The midwife's job is to help the mother through this process with careful and continuous monitoring of labour, and guidance on what to do as the birth progresses. All tasks of normal labour and birth can be performed by midwives who have been adequately trained and certified to have competencies of a SBA. Obstetricians can also perform these tasks, but their skill set is more relevant for intervening medically to deal with complications than to patiently and continuously assist a woman through labour and birth. The midwife is also expected to identify

12 *Care should be taken in interpreting this figure, which is based on self-reporting by women who may not know whether the person providing antenatal care is a doctor or a midwife.*

any complications and mobilize the support of other professionals as needed to deal with the complication.

Active management of the third stage of labour to deliver the placenta is recommended in Viet Nam, to prevent post-partum haemorrhage.

**Prevention and treatment of complications**

In any childbirth, complications can arise. With high quality antenatal care many complications can be identified prior to labour and appropriate prevention or mitigation measures taken. Other complications may be identified during labour and the mother transferred to a more appropriate setting or additional professional assistance, such as obstetricians, called in for support, treatment, and guidance.

Untreated HIV has a 15% to 45% risk of being transmitted from mother to child during pregnancy, labour, birth, or breastfeeding, but this risk can be reduced to less than 5% with effective PMTCT interventions.[13] Ideally, HIV screening is conducted early during pregnancy and ARV therapy initiated for all HIV-positive mothers to prevent deterioration of their own health and to protect the foetus from infection. If HIV is not detected until labour, emergency C-section may be recommended to reduce the risk of transmitting the virus to the infant during delivery when there is a high viral load. Testing during childbirth also allows for appropriate advice to be given to mothers to prevent transmission of the virus to the baby during breastfeeding. In Viet Nam in 2015, 64% of the more than one million pregnant women tested for HIV were not tested until they were in labour (MCHD statistics). Some 1,646 women tested positive for HIV during pregnancy or knew their HIV status prior to pregnancy. Reports indicate that 1,324 were receiving ARV drugs prior to delivery, so that the number diagnosed during childbirth seems to be 322 women. It is not clear whether these women were referred for C-section or had vaginal deliveries.

While normal delivery is best when there are no complications, there are a number of indications where C-section is recommended to ensure the health of the mother or baby. No studies have been done in Viet Nam to assess the indications for C-section as currently practiced, such as with the Robson scale. The proportion of births involving C-section is estimated at 27.5% in 2014 [6], while MCHD statistics for 2015 put the figure at 30%. In Viet Nam, about 14.2% of births in 2014 were elective C-sections [6], i.e. the C-sections that were planned in advance of labour, which would not go through the normal labour and birth process. Another 13.3% of births were emergency C-sections undertaken in response to complications arising during labour.

C-section is a major abdominal surgery. Primary C-section is classified as a Type II surgery, while second and later C-sections are classified as Type I surgery.[14] Both types of surgery are labour intensive, requiring a surgical team consisting of one main surgeon, three assistants, one anaesthetist and one helper (50/2014/TT-BYT). It also generally involves substantially more post-surgical monitoring and care compared to normal delivery. C-sections can be performed in most district hospitals and higher in Viet Nam. Nurses are the main personnel involved in assisting at surgery, however midwives are the key personnel to receive the newborn and perform initial neonatal care.

For prolonged pregnancy beyond 40 weeks + 10 days, induction of labour may be recommended. There are no statistics on the number of cases of labour induction in Viet Nam, nor on the number of pregnancies lasting beyond 40 weeks +10 days. This procedure would generally be indicated and guided by an obstetrician, and the

13 *WHO. http://www.who.int/hiv/topics/mtct/about/en/*

14 *Type I surgery is considered complex and dangerous to the patient's life, and requires high technical qualifications; most are implemented only in central- or provincial-level facilities. They may require specialized equipment. The average duration of surgery is from two to three or more hours. Type II surgeries are considered to be implementable at central, provincial, and some district hospitals, with lower risk of death to patient than type I surgeries. They require only common surgical equipment and the duration is from one to three or more hours.*

woman monitored and drugs administered by a midwife.

Post-partum haemorrhage is a life-threatening condition and for survivors is a cause of severe anaemia. Management of post-partum haemorrhage can be implemented by manual removal of placenta, suturing of tears, surgical procedures, and administration of oxytocin or other medications, while new methods are being explored to add to the toolkit [83,84]. MCHD statistics indicate an incidence of 1,874 post-partum haemorrhages in Viet Nam in 2015. A WHO study estimating incidence of severe post-partum haemorrhage[15] in the Western Pacific Regional Office (WPRO) region gives estimates of post-partum haemorrhage of 6.3% to 8.1% of live births or 2.77 to 4.5 cases per 1,000 women of reproductive age [85]. This yields estimates from 66.5 to 120 thousand cases in Viet Nam in 2015. Care for post-partum haemorrhage can be implemented by midwives at commune health stations, but the guidelines recommend stabilizing the patient and transferring her to a hospital. If this occurs in a hospital, it is likely that an obstetrician would provide treatment.

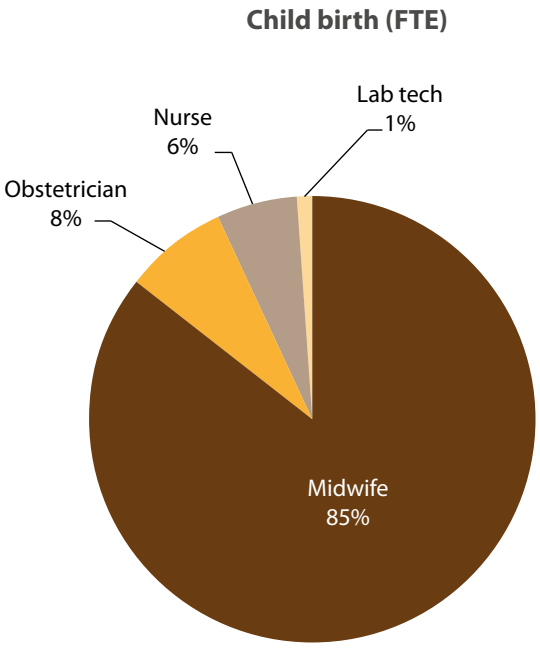
**Summary on midwifery needs during childbirth**

Based on the analysis following the SoWMy methodology applied to the Vietnamese health system, the need for midwives and other health personnel to provide essential childbirth interventions is summarized below. The estimates assume that midwives are responsible for monitoring labour and assisting at normal births, and that doctors play primarily a supervisory role in this stage. The analysis assumes C-sections for 20% of all births, even though this is double the rate of 10%, above which there is no evidence of improved mortality outcomes [86]. Half of C-sections are assumed to be emergency, so support during labour for those women is still included, while the other half are assumed to be planned (these women do not go through labour with a midwife). For C-section deliveries, midwives are considered to have a minimal role during the procedure as their training does not adequately cover this work. However post-surgery care is assumed to involve both nurses and midwives to care for mother and newborn. For induced labour or post-partum haemorrhage care, midwives play an important supporting role to the woman and the obstetrician.

Figure 22 illustrates that midwives can meet a majority of midwifery service needs during childbirth, since most births are normal and uncomplicated, but do take a substantial amount of time from onset of labour until the child is born naturally. In the analysis this is assumed to be on average six hours. However, there is an ongoing international debate about the normal length of labour, which could extend this amount of time substantially. The amount of midwife time would also vary depending on how early in labour women present at a birthing facility, whether the woman delivers in a hospital setting, whether midwives are serving more than one woman at a time during early labour, whether the care is provided in a birthing clinic or home birth setting, and whether the midwife stays continuously with the mother throughout the labour and delivery. Note that the midwife time described in this section does not include post-partum care.

15 *Based on estimates of postpartum hemorrhage defined as more than 1000ml of blood loss.*

## Figure 22: Structure of need for providers of childbirth essential midwifery services, 2015

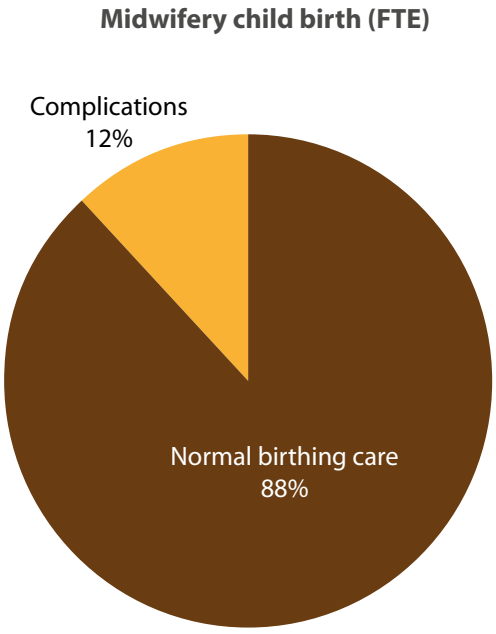



*Note: Childbirth services consist largely of monitoring labour, assisting at birth - including active management of third stage of labour, but also with C-sections - induced labour and post-partum haemorrhage treatment.*

*Source: See Annex 3 for assumptions and data sources used in estimation.*

The work that midwives perform during childbirth care is largely the routine antenatal care for normal pregnancies, with about one-fifth of their time spent assisting obstetricians with complications (Figure 23).

## Figure 23: Structure of childbirth needs met by midwives, 2015

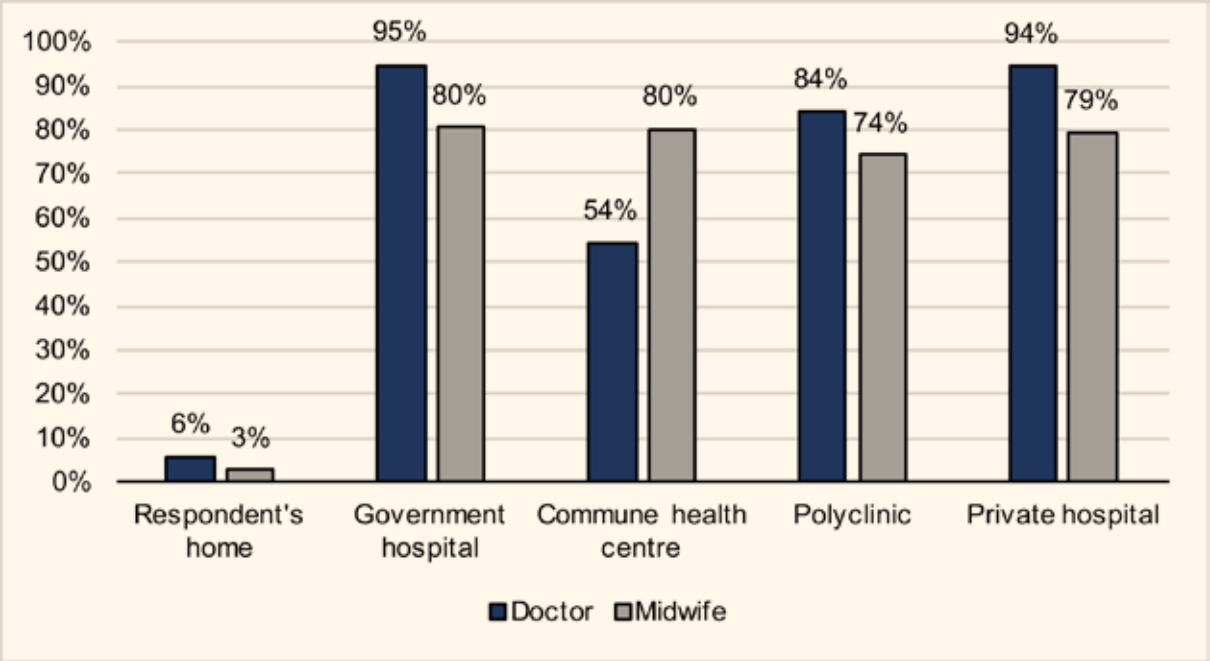



*Source: See Annex 3 for assumptions and data sources used in estimation.*

While there is a lot of potential for midwives to become the main SBA for normal births (most births) in Viet Nam's system, the current situation is quite far from reaching that potential. In 2014, hospital births were more likely to be attended by a doctor than midwife, while the opposite is true in the commune health stations (Figure 24).

While in some cases both doctors and midwives assist at the birth, it does appear that doctors are the sole attendant at a high proportion of births.[16] For home births, skilled attendance (doctor or nurse/midwife) is very low, and the proportion of home deliveries assisted by VHWs (possibly trained VBAs) was only 5.5% [6].

**Figure 24: Who assisted at the birth? Viet Nam, 2014**




*Source: MICS 2014 [6]*

16 *Care should be taken in interpreting these results based on self-reporting by women giving birth who may not know whether the health worker was a doctor or midwife.*

### *3.1.6. Post-partum/post-natal care*

The main indicator of need for post-partum/post-natal care is the number of women giving birth and the number of live births, which differ only slightly due to twin births and stillbirths. Essential interventions in the post-partum period include those targeted to mothers and others targeted to infants, and they include both preventive measures as well as treatments for complications.

**Postpartum care for mothers**

Essential postpartum care for mothers: breastfeeding support and advice; family planning advice and contraceptives; and early parenting, sleep, settling, and nutritional counselling are needed by all new mothers. The WHO recommends that infants are breastfed exclusively for six months and continue to receive breastmilk for 12 months or longer. Breastfeeding significantly contributes to improved health outcomes for both women and babies including protection against infection and the development of chronic diseases in adulthood. Women need time to recover from the demands put on their bodies during pregnancy and childbirth by spacing their next birth through effective use of contraception. This requires careful explanation of alternative options and their effectiveness so women can make informed choices. Prevention and treatment of anaemia, through diet or medical interventions, are important post-partum interventions to deal with substantial blood loss that women experience during childbirth, particularly among women who were anaemic during pregnancy or those who suffered post-partum haemorrhage. These preventive interventions are within the scope of expertise and work of midwives, and can be provided in the healthcare setting before the woman returns home.

Post-partum sepsis in women requires urgent antibiotic treatment. One study estimated the incidence of postpartum infection in Viet Nam reached a conservative estimate of 1.7%, and incidence of serious infection at 0.5%, although when a verbal autopsy approach was employed, the estimate of postpartum infection jumped to 4.6%. The study also noted that 98% of women had been given prophylactic antibiotics [87], likely as part of episiotomy treatment. Regional estimates of post-partum infection indicate a rate of 4.4% for WPRO [88]. In most cases care would be provided in a referral setting for those giving birth in primary care facilities, or in the hospital where they gave birth. Care for this complication is generally prescribed by a medical doctor, with midwives administering the prescribed drugs to the women.

For women who were not tested for HIV antenatally, screening during labour can help to identify women who need ARV therapy to prevent transmission of the virus to their infant after birth. From MCHD statistics in 2015, 322 HIV-positive women were not using ARV at the time of birth and would require this intervention. After giving birth, new mothers found to be infected with HIV require substantial emotional support as well as information and education on treatment for themselves, and testing and treatment for their baby. They need to be referred to ARV care and treatment facilities for continued treatment of this chronic condition.

**Postnatal care for newborns**

The essential early newborn care package has been introduced into the Vietnamese maternal and child health care system and is now the recommended standard for newborn care. In 2015, MCHD statistics indicate that 41% of newborns received these services.[17] Essential elements for all infants include provision of thermal care to prevent hypothermia (immediate drying, warming, skin-to-skin contact, and delayed bathing), promotion and support for early initiation and exclusive breastfeeding (within the first hour), and promotion and provision of hygienic cord and skin care, and newborn immunizations (in Viet Nam these are for hepatitis B and BCG). For infants who are not

17 *Form 4/BMTE-V from MCHD for 2015.*

*Ảnh do Đoàn Bảo Châu chụp tại Yên Bái*

breathing at birth, neonatal resuscitation with bag and mask must be initiated immediately. This is estimated to occur in about 1% of cases based on SoWMy assumptions.

Some infants have special needs, particularly those with low birth weight and preterm infants. MICS estimates low birthweight in 5.7% of all newborns in Viet Nam [6], while MCHD statistics indicate a lower rate of 3.7% (using 2,500 g as the threshold). Preterm births (<37 weeks gestation) are estimated at 11.8% in Viet Nam [79]. For preterm infants, respiratory distress is one of the main factors leading to neonatal mortality. The two essential interventions are surfactant to prevent respiratory distress syndrome, and for those children who suffer respiratory distress syndrome (estimated at 1% of all births or about 15,000 newborns annually), treatment in a continuous positive airway pressure (CPAP) ventilator, with the assumption that this involves 24-hour treatment over 14 days for the infant. The kangaroo mother care model is recommended for this group of infants, along with extra support for regular feeding of small and preterm babies.

Severe hyperbilirubinemia (jaundice) and kernicterus (bilirubin-induced brain dysfunction) can cause significant morbidity and mortality in countries like Viet Nam that lack capacity for bilirubin screening and blood typing, and do not have phototherapy equipment and Rh immune globulin [89]. Traditional Vietnamese post-partum care practices include formula-feeding infants while waiting for breastmilk to come in, use of mothballs to store infant clothing, and avoiding exposure of newborns to direct sunlight. These are all risk factors for neonatal jaundice. In addition, the lack of follow-up postnatal care after discharge is likely to contribute to delayed diagnosis of this condition, and the need for more expensive and difficult-to-access exchange transfusion therapy. While no statistics are available about neonatal jaundice in Viet Nam, the SoWMy estimates that roughly 6% of newborns are in need of phototherapy to treat jaundice, which would amount to about 91,000 newborns in 2015.

All babies born to mothers with HIV infection are supposed to be given ARV treatment immediately after birth as part of the PMTCT protocol. MCHD statistics indicate that 1,500 infants are born to HIV-positive mothers annually. VAAC reports a slightly higher number, indicating that among 1,691 HIV-positive women giving birth in 2015, 1,700 children (possibly including multiple births) were provided immediate ARV treatment. While not covered in the scope of this analysis, continued follow-up care to ensure that these infants are given HIV tests and are obtaining HIV treatment could be performed by midwives working in a continuous relationship with mothers in their community.

Newborns at risk of bacterial infection and those suffering from sepsis, meningitis, or

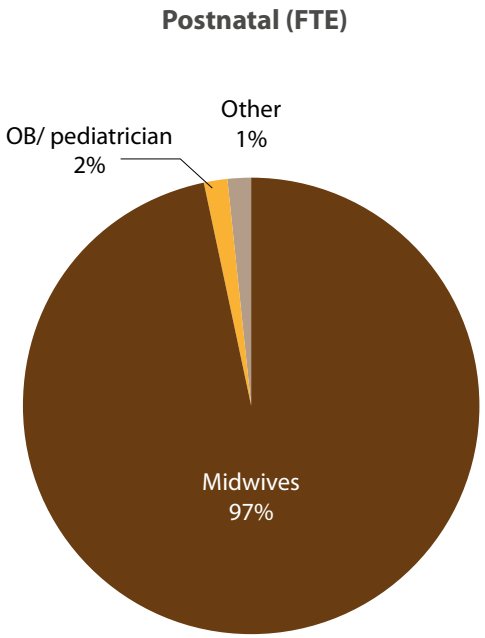
pneumonia are in need of attention from a medical doctor to diagnose their condition and provide appropriate antibiotic therapy. There are no national estimates of prevalence of these conditions in newborns for Viet Nam, although some smaller studies exist. One study found high rates of late-onset nosocomial sepsis in newborns in a neonatal unit in Central Viet Nam [90]. Another study in a paediatric hospital in Viet Nam found that the source of septicaemia in children was environmental hygiene [91]. The SoWMy assumes that 20% of newborns are at risk, which would amount to almost 300,000 newborns in need of monitoring and assessment, with only a small share of those requiring antibiotic therapy to treat confirmed septicaemia.

**Summary on midwifery needs during the post-partum period**

Based on the analysis following SoWMy methodology applied to the Vietnamese health system, the need for midwives and other health personnel to provide essential postpartum interventions are summarized below. The estimates assume that midwives are responsible for basic preventive interventions in the immediate postpartum period, to be provided to both mothers and newborns. While the estimates below assume midwives are performing most of these postpartum tasks, nurses may also be involved, such as in care of newborns on CPAP (NICUs), treatment of jaundice, or care of newborns with neonatal sepsis. Doctors are assumed to play a largely supervisory role, providing examinations and prescriptions to treat complications.

Figure 25 indicates that midwives can meet the vast majority of post-partum needs of mothers and post-natal needs for essential interventions for newborns. Essential preventive interventions include counselling on family planning and nutrition, anaemia treatment, and essential early neonatal care including breastfeeding advice and coaching. Care of preterm and low birthweight infants and of puerperal and newborn infections can be done largely by midwives under the supervision of a medical doctor, although nurses may be able to perform many of these tasks as well, particularly if the infant is transferred to a paediatric hospital.

**Figure 25: Structure of need for providers of postpartum/postnatal essential midwifery services in Viet Nam, 2015**

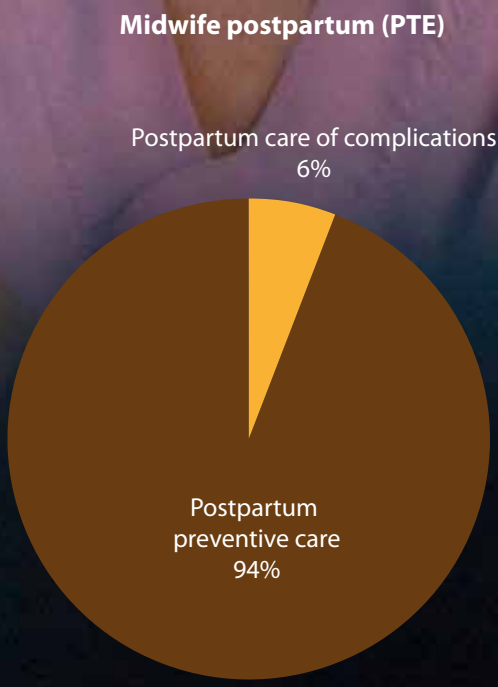



*Source: See Annex 3 for assumptions and data sources used in estimation.*

*Note: FTE=full-time equivalent.*

The work that midwives perform during the post-partum period consists largely of the routine preventive care, with less than 10% of their time spent on complications (Figure 26)

**Figure 26: Structure of childbirth needs met by midwives in Viet Nam in 2015**




*Source: See Annex 3 for assumptions and data sources used in estimation.*

*Note: FTE=full-time equivalent.*

### *3.1.7. Other maternal and child health needs not listed in the 46 essential interventions*

While the 46 essential midwifery interventions in the SoWMy cover a majority of all midwifery services, other services are also part of reproductive health and were not been analysed above.

Post-partum depression is an often neglected problem in many societies, including Viet Nam. Mental health problems during pregnancy or in the post-partum period can lead to adverse health outcomes for mothers or children. One study found that third trimester antenatal common mental health disorders were associated with lower birthweights and preterm birth in a district in Viet Nam [92]. Many factors influence a woman's social and emotional wellbeing, including the hormonal changes occurring during pregnancy and after birth, and this can be exacerbated by domestic violence [93]. A number of other studies have measured the rate of mental health problems of pregnant women and new mothers in Viet Nam [92,94–110], but advocacy for these issue nationally and internationally has not yet yielded changes in policy, guidelines, or training programs.

Rubella vaccination has recently been introduced into the Expanded Programme on Immunization as a high rate of congenital rubella syndrome was found [111,112]. Folic acid to prevent neural tube defects and syphilis screening during antenatal care combined with Vitamin K1 injections at birth aim to reduce the risks or to treat early congenital or neonatal disorders. Jaundice treatment to eliminate incidence of kernicterus is also receiving some attention.

Domestic violence was estimated to be prevalent in 21.1% of married couples in 2006 [113]. In these situations there are known risks to pregnant women and the foetus due to direct violence, or through depression that can occur to women facing intimate partner violence [93]. As a trusted health provider in a continuous relationship with women during pregnancy and through the post-partum period, midwives can play an important role in detecting and intervening in cases of domestic violence. Midwife training and scope of work (Circular 26) include responsibility for counselling and referral for women facing domestic violence. However, it is not yet clear how this work is being organized, supervised or supported.

The severe imbalance in the sex ratio at birth in Viet Nam is a major cause for concern [31]. The population pyramid in Figure 1 of the Background section shows quite clearly how this imbalance has persisted and is adversely affecting the sex ratio of young people approaching marriage and child-bearing ages. Midwives can play an important role in working with pregnant women to help them to counter societal and familial pressure that undervalues daughters and may lead them to the illegal practice of sex-selective abortion.

Screening for HIV and syphilis are considered essential midwifery services, but screening for hepatitis B and preventing transmission from mother to child is also important in Viet Nam, and WHO is currently advocating for increasing attention on this important infection.

Cancer detection for women (cervical and breast) is a growing area of reproductive health care in Viet Nam at all levels of public health facilities, and in some private facilities. While midwives could be involved in providing these services, they fall outside the scope of the 46 midwifery interventions in the SoWMy methodology and

are therefore not covered in this report.

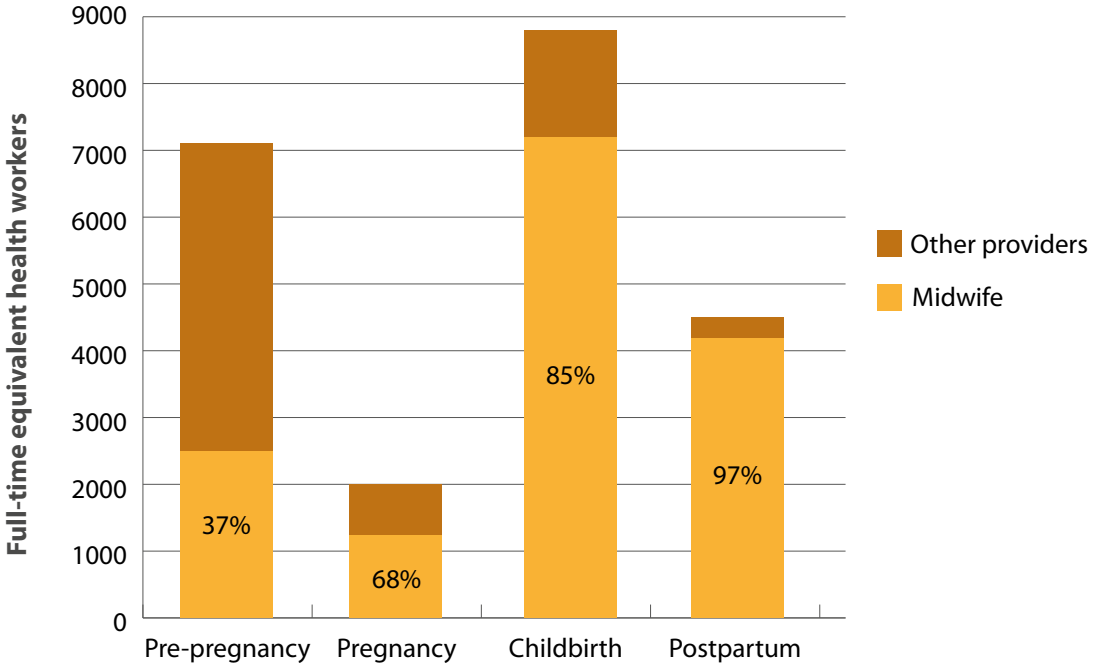
Post-neonatal child healthcare (nutrition, immunizations, dealing with common childhood diseases, well-baby visits) is considered an important responsibility of midwives working at commune health stations and regional polyclinics. However, the scope of services covered in this report is limited to services up to 42 days postpartum, so these services are also not covered.

### *3.1.8. Summary of findings on needs for midwifery services*

The analysis presented above is summarized in Figure 27. A rough analysis of the 46 essential midwifery interventions in the four stages of pre-pregnancy, pregnancy, childbirth, and postpartum care is translated into full-time equivalent for midwives and other providers. The analysis reveals the overall higher time allocation for pre-pregnancy care, which is due to its coverage of all reproductive age women with nearly universal family planning counselling, and extensive coverage of family planning delivery and STI/HIV screening and treatment services. Because Viet Nam has organized STI/HIV care services, with a large population worker network in place, many tasks that midwives could do are currently performed by other providers. Thus, midwives serve only about 37% of midwifery needs for this stage. For the remaining three groups, midwives dominate as the primary provider to meet service needs. They provide the routine and preventive care needed by most pregnant women and newborns, and refer, assist, or are supported by other practitioners in cases of complication.

Note that the estimates in this Figure 27 are in full-time equivalent health workers. The estimates appear a bit low, which reflects several aspects of the methodology. First, the time estimates for each service only count the time directly working with clients, and not the time allocated to administrative tasks or time on call and available if needed. Second, the 46 essential midwifery interventions are not the only reproductive health and MCH interventions that these health workers have to deal with. For example, obstetricians are generally also gynaecologists, while commune health station midwives are often involved in other tasks such as implementing the expanded program on immunizations. Despite these shortcomings, the methodology does show quite clearly the centrality of midwives in midwifery services. The following section describes the availability of midwives and of midwife services in Viet Nam.

**Figure 27: The relative share of midwives to overall workforce required to meet four groups of essential midwifery service needs in Viet Nam, 2015**




*Source: Estimates based on SoWMy methodology. See Annex 3 for detailed assumptions.*

## 3.2. Availability

Viet Nam's extensive investments in a diverse network of government health service facilities and a growing private sector create contribute importantly to coverage of midwifery services. A large government reproductive health workforce exists throughout the country and at all levels, with a core midwife workforce possessing basic secondary education and a growing number of specialist obstetricians. Efforts are being made to ensure availability of services to specific target groups including ethnic minority women and women in remote areas, as well as to young people, and this will be discussed more in the section on accessibility. This section describes the current availability of the midwife service network workforce nationally, including midwives and other midwifery service providers. Focusing on midwives, the section describes geographic availability of midwives in relation to the population served. Recent trends in midwife availability and future plans for training midwives are also described, along with a short discussion of the attractiveness of the midwifery profession, which can significantly affect future midwife availability. The second part of this section describes the availability of specific midwifery services in government health facilities at different levels.

### *3.2.1. Major achievements in midwife and maternity service availability*

Viet Nam is rapidly scaling up training of 3-year midwives and nearly 2000 3-year midwives have graduated since the curriculum was introduced in 2010. At the same time, the network has rapidly expanded technical capacity to provide maternity services at all levels of the system, including VBAs with competency-based training. These achievements are summarized in Table 9.

**Table 9: Significant achievements since 2010 affecting availability of the midwifery workforce and midwifery services in Viet Nam**

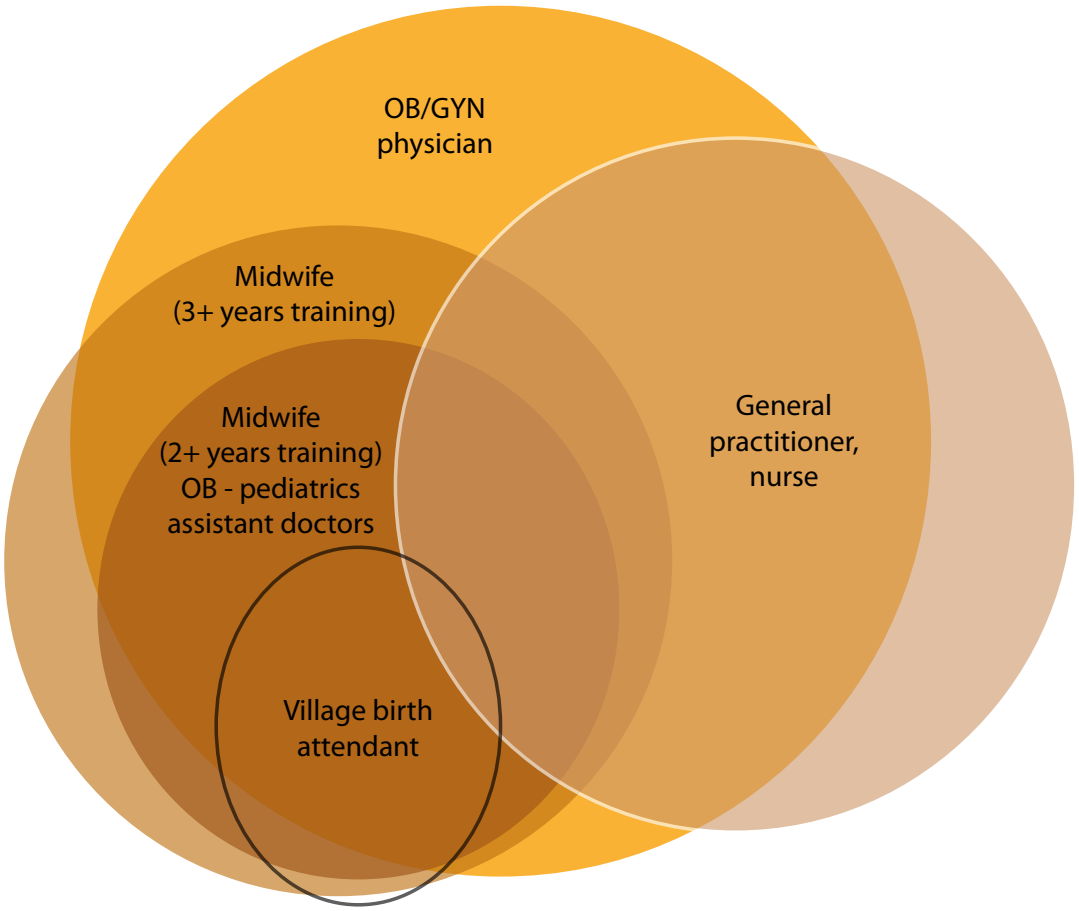
| Achievement | Evidence | Data source |
|---|---|---|
| Expanded capacity for training junior college midwives | Increased number of training establishments providing junior college and higher level midwife training | VMR2016 Survey combined with information pulled from 2016 student recruitment information books for three levels.[18] |
| Increased reproductive health workforce, particularly midwives | Total midwifery, OB/GYN, VBA workforce has grown over the period 2007-2013 | MCHD Surveys 2007, 2010, 2013. |
| Growing number of VBAs trained and serving remote areas | MOH report on number of VBAs and new VBAs receiving training | MOH reports. |
| Expansion in service availability | Comparison of % of facilities providing various core reproductive health services from 2010 to 2013 | MCHD surveys 2010 and 2013. Annual reports 2004-2015 of MCHD. |

### *3.2.2. Structure and trends in the midwifery workforce*

As shown in Figure 28, there is a substantial overlap, but also independence, among different types of health professionals providing midwifery services in Viet Nam. Each one of the cadres has their own unique contribution to give, including VBAs who often have intimate knowledge of cultural practices that are important to the women and their families. It can be seen that the 3-year midwifery training builds on the 2-year midwifery training and this training will result in skills and knowledge that are unique to the midwife, just as the skills and knowledge of OB/GYN physicians, general practitioners and nurses are unique to their professions.

18 *Ministry of Education and Training (2015) What you should know about student recruitment for university, junior college and secondary vocational education [Những điều cần biết về tuyển sinh đại học, cao đẳng và trung học chuyên nghiệp.]*

**Figure 28: Overlap and independence of different midwifery personnel in Viet Nam**




The public midwifery workforce reported in this section of the report is defined both by the qualifications of the individual and the place of work. In OB hospitals and OB departments of general hospitals at all levels, the midwifery workforce consists of obstetricians, general practitioners, OB/paediatric assistant doctors, general assistant doctors, and midwives [19 ]. In addition, all doctors, assistant doctors, and midwives working in provincial reproductive health centres, reproductive health departments of district health centres, regional polyclinics, and commune health stations are considered to be in the midwifery workforce (Table 10).

19 *Note that for district hospitals and obstetrics-pediatrics hospitals, general practitioners working in pediatrics could not be excluded from the maternity workforce because only aggregate figures are available in the tabulations in the maternal and child health department survey reports.*

**Table 10: Size of maternity workforce (public sector) in Viet Nam by type of qualification, 2007~2013**

| Qualifications | 2007 | 2010 | 2013 |
|---|---|---|---|
| PhD/second-level specialist in OB | 135 | 249 | 292 |
| Masters/first-level specialist in OB | 1,462 | 1,724 | 1,980 |
| Doctor with OB orientation | 1,344 | 1,151 | 1,099 |
| Paediatrician working in OB hospital/ ward | 165 | 179 | 385 |
| General practitioners | 9,264 | 9,713 | 13,058 |
| OB/paediatric assistant doctor | 8,534 | 7,201 | 7,902 |
| General assistant doctors | 11,063 | 18,228 | 24,836 |
| University/college midwife | 1,456 | 1,731 | 2,255 |
| Secondary midwife | 15,341 | 21,541 | 24,135 |
| Elementary midwife | n/a | 1,449 | 763 |
| VBA | | | 1,951* |
| University/college nurse | 509 | 1,236 | n/a |
| Secondary nurse | 9,557 | 17,426 | n/a |
| Elementary nurse | n/a | 2,854 | n/a |
| Total midwifery workforce (excluding nurses) | 48,599 | 62,987 | 76,320 |

*Source: MCHD Survey, 2010 [20] and 2013 [5]. 2007 figures cited in Review of SBAs in Viet Nam (2010) p. 59 [21]; VBA information for 2015 from MCHD data collection.*

It is important to clarify the qualifications of different types of providers. Doctors oriented towards OB, or with first or second-level specialization are those who have continued for one, two, or three years of additional training beyond medical school. The number of specialists with a PhD has more than doubled between 2007 and 2013. OB-paediatric assistant doctors are general assistant doctors who have obtained an additional six months of specialized training, although this training program was discontinued around 2006. Among midwives, university consists of a 4-year OB nursing program, while college consists of 3-year midwifery training, and secondary consists of 2 years. However, prior to 1998, secondary midwifery training consisted of 3 years of training plus long periods of supervised clinical practice, while elementary midwifery consisted of 1 year of training, but these training programs no longer exist and these individuals are no longer given the professional title of midwife (Circular 26). As of 2013, 94% of midwives (including OB-paediatric assistant doctors) in public healthcare facilities had only secondary or elementary-level training, while only 2,255 were reported to have university or junior college training. The Health Statistics Yearbook indicates that in the following year (2014), 1,538 government midwives had college, university, or higher-level training [12].[20] This seems to be consistent with results of the VMR 2016 survey, which finds that currently there are about 2,000 graduates of junior college midwifery training (started only in 2010), though not all of them have found work in public sector midwife positions.

The existing estimates of the size of the midwifery workforce may be an undercount since information is missing on the HIV/STI treatment facilities under the Viet Nam Administration of HIV/AIDS Control and on the network of provincial-level facilities in the dermatology network that provide STI care. In addition, population workers are not counted in the MCHD estimates of the reproductive health workforce, although the GOPFP reports that there were 167,185 of them in 2011 [30]. Nurses have been excluded from much of the maternity workforce estimates below because information is missing on this part of the workforce in 2013 statistics, even though they may be involved in providing midwifery services, particularly OB nurses and general nurses assisting in OB surgeries. In addition to the public maternity workforce, there is also a growing private sector maternity workforce, but information is not available yet on the size of this workforce. MCH reports a total of 1,951 VBAs at the end of 2015.[21] At the same time, these estimates are likely to overestimate the midwifery services workforce for several reasons. The information includes general practitioners and assistant doctors who may not be providing midwifery services, but the data gathering instruments were unable to separate them out from those who are providing midwifery services.

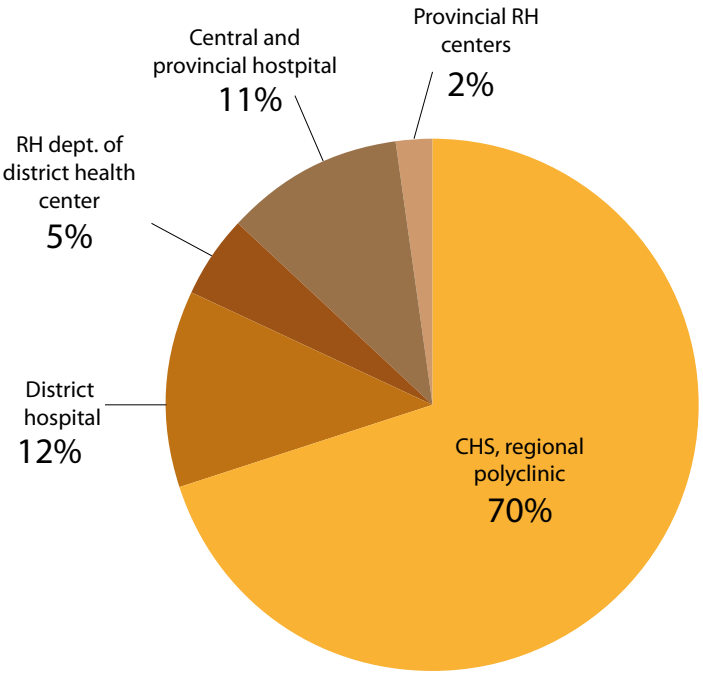
The professional registration system of the MSA should have information in their database on all currently practicing health workers, including their qualifications, registered scope of work, years of experience, current workplace, continuing medical education achievements, and age. This could easily be exploited to get better national statistics on the reproductive health workforce for planning purposes. Unfortunately, the MSA has not yet analysed these data and was not able to share it with the research team.

The majority of the public midwifery workforce is located at the grassroots-level facilities including the commune health stations and regional polyclinics, accounting for 70% of the total, although these health workers are not working exclusively providing midwifery services (Figure 29). About 33% of the midwifery workforce is working in public hospitals at all levels. The remaining 7% work in reproductive health centres at the provincial level or in district health centres. This structure of the workforce excludes the categories of reproductive health workers for whom information was not available, as described above.

20 *Note an inconsistency in how midwife statistics are reported. In the MCHD reports, junior college, and university-level midwives are combined and secondary is a separate category, while in the Health Statistics Yearbook of the MOH, secondary and junior college are combined and university level is a separate category.*

21 *MCHD report "EMM Training and Utilization", 2014.*

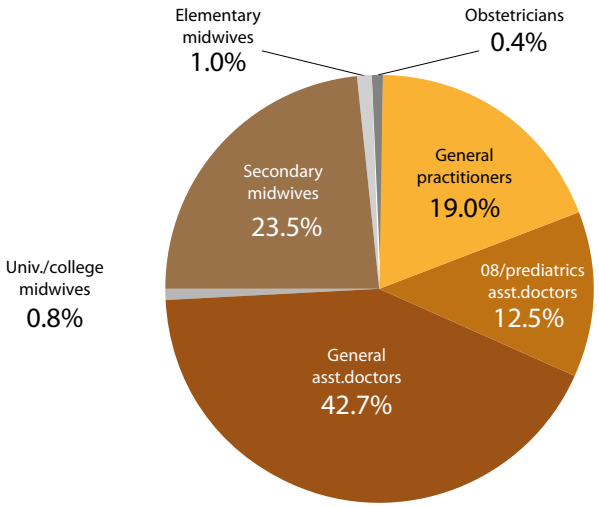
**Figure 29: Workplace structure of public reproductive health/maternal and child health workforce in Viet Nam, 2013**




*Source: MCHD Survey 2013 [5]..*

At the primary care level (commune health stations and regional polyclinics), a majority of the midwifery workforce has general, rather than specialized, midwifery training, with general doctors and assistant doctors accounting for 61.7% of the total (Figure 30). OB/paediatric assistant doctors and secondary midwives account for 36% of the total, with an additional 1% being elementary midwives. About 1.2% of the midwifery workforce at the commune level has specialized training (OB or university/college midwifery). Placing obstetricians or paediatricians at the commune health stations would be an inefficient use of a highly trained medical professional who should be available for referral care rather than primary care. Nevertheless, it is essential that these primary care facilities have highly skilled junior college midwives, competent and skilled enough to work autonomously and in a continuity of care model to provide the core essential midwifery services to women and newborns in the community. General practitioners and nurses lack the specialized midwifery skills needed.

**Figure 30: Midwifery qualifications structure of commune health stations and regional polyclinics in Viet Nam, 2013**

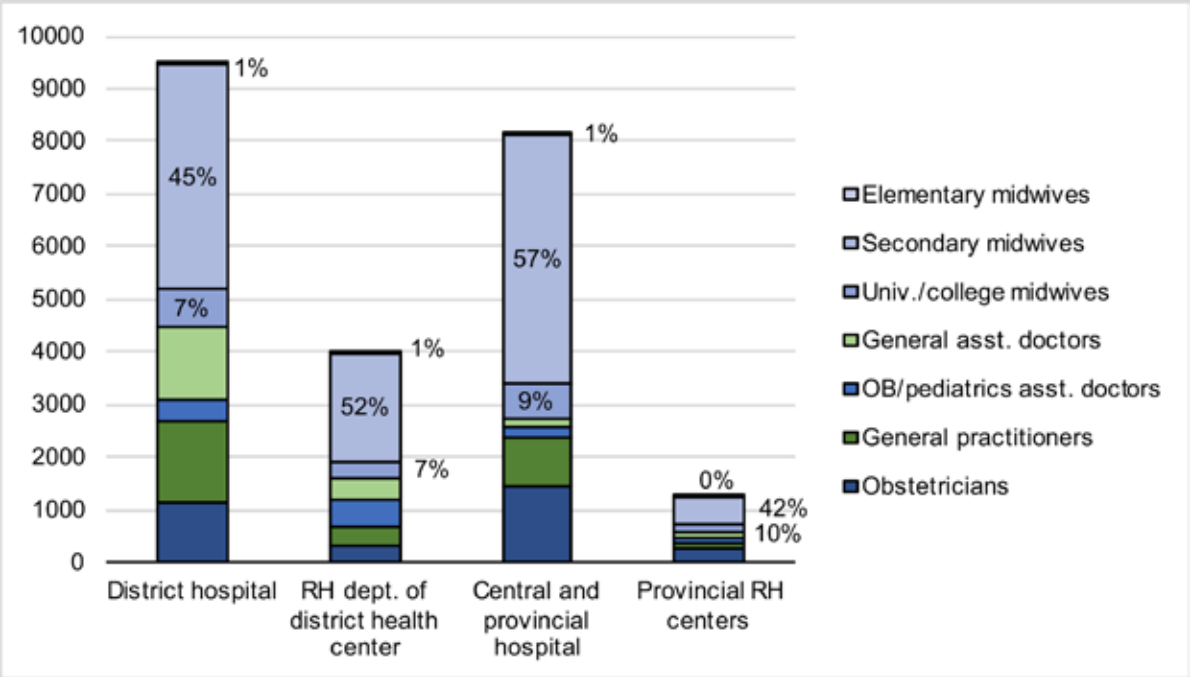



*Source: MCHD Survey 2013[5].*

*Note: CHS=commune health station*

Secondary midwives make up the bulk of the midwifery workforce in hospitals and reproductive health centres. It appears that in district hospitals, general practitioners and general assistant doctors account for a large share of the midwifery workforce, but this may include staff working in paediatrics rather than obstetrics, and they are unlikely to work full time on midwifery services. Obstetricians account for a relatively small share of the midwifery workforce, except in central and provincial hospitals and reproductive health centres, where they account for about one in five midwifery personnel (Figure 31).

**Figure 31: Midwifery qualifications structure at hospitals and reproductive health centres in Viet Nam, 2013**



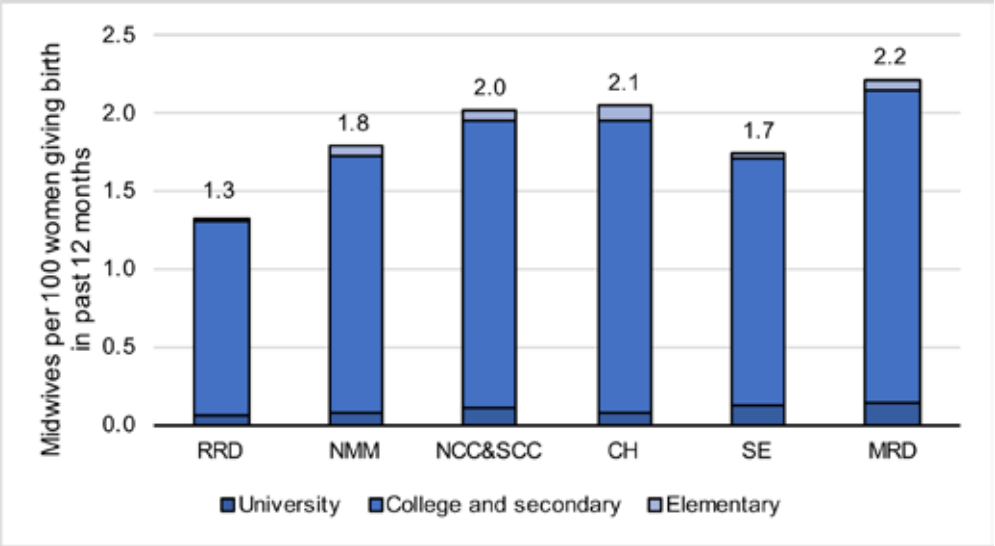

*Note: Labels indicate the midwife share of the workforce in each facility.*

*Source: MCHD Survey 2013 [5].*

### *3.2.3. Geographic availability of midwives*

Geographic distribution of midwives generally follows the geographic distribution of the general population. **A normalized indicator used to assess disparities in availability of midwives is the ratio of midwives to 1,000 women giving birth.** Results in Figure 32 suggests that the two wealthiest regions of Viet Nam have the lowest availability of midwives compared to the need. However, the statistics on availability of midwives does not take into account central and private hospitals, which are mainly located in the two wealthiest regions of the Red River Delta and Southeast. The figures also do not include VBAs, who are likely to be concentrated in the Northern Midlands and Mountains region and the Central Highlands. However, the figure does show that there is about one midwife for every 50 women giving birth each year, and this ratio varies little across regions, except in the Northern Midlands and Mountains where there is a relative shortage of professional midwives. Unfortunately, regional figures cannot show us where the junior college midwives are concentrated as they are combined with secondary midwives in the Health Statistics Yearbook.

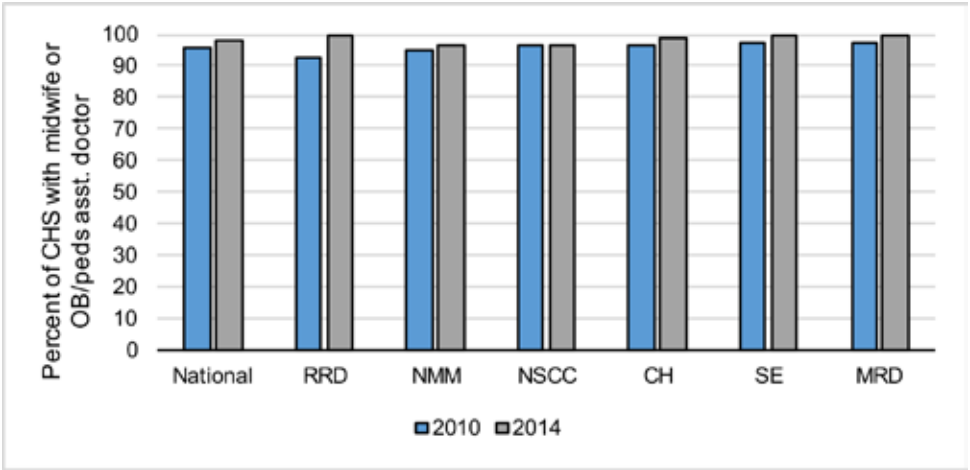
**Figure 32: Number of midwives per 100 woman giving birth in past 12 months in Viet Nam, 2014**




*Source: Women giving birth from GSO, Intercensal Demographic Survey 1/4/2014; Number of midwives from MOH Health Statistics Yearbook 2014.*

Another key indicator of midwifery availability is the proportion of commune health stations with a midwife or OB-paediatric assistant doctor. This indicator was first introduced in 1996 with the health sector strategy for the period 1996-2000 (37-CP). Figure 33 shows that by 2010, midwives were nearly universally available at all commune health stations, and that this rate continued to increase through 2014.

**Figure 33: Availability of midwives at the commune level by region of Viet Nam, 2010~2014**




*Source: Health Statistics Yearbook 2010 and 2014.*

### *3.2.4. Education of midwives contributing to increased availability of midwifery workforce*

This section discusses education in terms of its role in increasing the number of midwives to serve the needs in Viet Nam for midwifery services. The issues of quality of midwifery training will be discussed in detail in Section 3.5 on Quality.

**Current capacity of the formal (pre-service) midwifery education network**

Viet Nam currently has several direct entry-level midwifery education programs, including 2-year (secondary) and 3-year (junior college) diplomas, and a 4-year bachelor's degree (Table 26). The framework curricula for the 2-, 3- and 4-year midwife training programs were approved or endorsed in 2003, 2010, and 2014, respectively. The curriculum reform will be discussed in section 3.5.

Out of the nation's 156 medical training establishments, only 40 report providing some form of midwifery training in 2016 (Table 11). Out of those, six reported some university-level program (Nam Dinh Nursing University provides the only direct-entry midwife program, while the other five have nurse-midwife or OB nursing programs, and one of these is a private university). Some 21 public schools reported providing 3-year midwife training (16 junior colleges and five universities) and 27 public schools reported providing 2-year midwife training (13 secondary, 13 junior college and one university).[22] Some schools advertised recruitment of midwife students through the MOET,[23] but did not report enrolment of students, particularly at the secondary midwife level, where 44 secondary and junior colleges had quotas for secondary midwife recruitment in 2016, but only 26 reported secondary midwife enrolments.

**Table 11: Midwife training establishments in Viet Nam, 2016**

| | University | Junior college | Secondary medical | Total |
|---|---|---|---|---|
| Total | 32 | 49 | 75 | 156 |
| No midwifery training | 26 | 28 | 62 | 116 |
| Some midwifery training | 6 | 21 | 13 | 40 |
| Level of midwifery training | | | | |
| University-level (4-year) midwifery-related training* | 6 | 0 | 0 | 6 |
| Junior college (3-year) midwifery training | 5 | 20 | 0 | 25 |
| Secondary (2-year) midwifery training | 1 | 13 | 13 | 27 |

*Notes:*

- **Includes OB nursing, nurse midwife, or university-level midwife.*
- *Total includes all schools that indicated training in medicine, nursing, and for assistant doctors or midwives in their 2016 recruitment documents for students.*
- *Some schools provide training in more than one level of midwifery.*
- *Six universities that provide midwifery training include Hanoi Medical University, Thang Long University, Hai Phong Medical and Pharmaceutical University, HCMC Medical and Pharmaceutical University (nurse-midwife), Nam Dinh Nursing University, and Hai Duong Medical Technology University. Only Nam Dinh has a direct-entry university midwife program.*

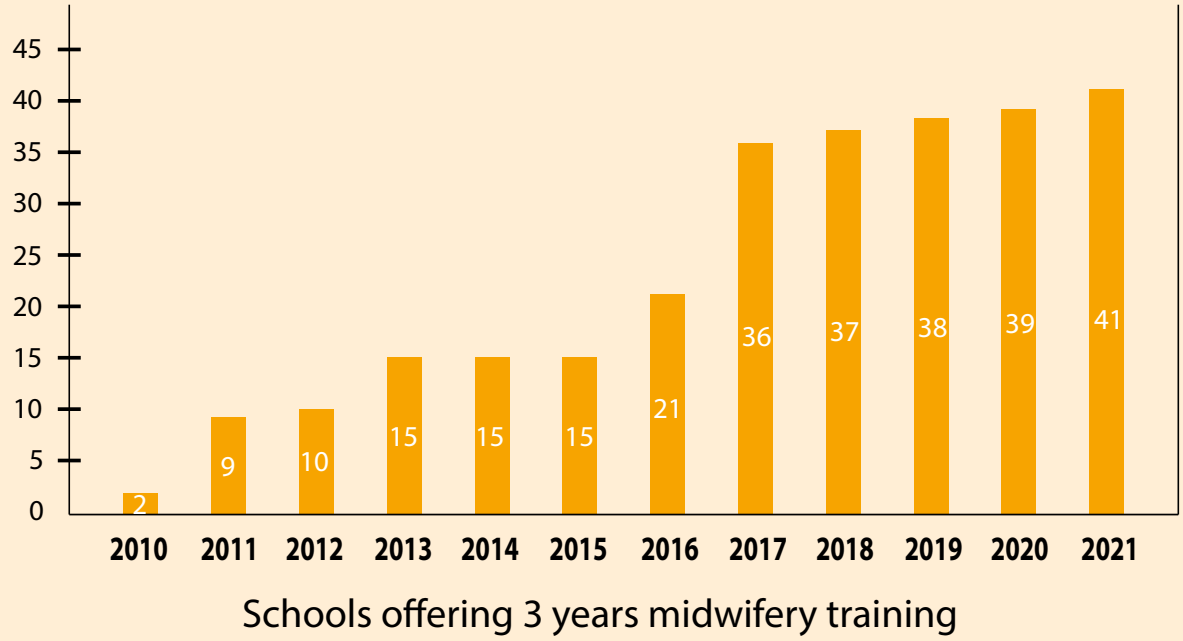
*Source: VMR 2016 survey and MOET's 2016 version of "What you should know about student recruitment for university, junior college and secondary vocational education".*

22 *Pham Ngoc Thach Medical University reported training in both junior college and secondary midwife.*

23 *Information extracted from the MOET document "What you should know about student recruitment for junior college and secondary vocational education"*

After the introduction of the 3-year midwifery training in 2010, there has been a steady growth in the number of universities and junior colleges providing this level of training (Figure 34). The VMR 2016 Survey responses indicate that a substantial number of schools plan to offer 3-year midwife training by 2021, including some secondary schools that have plans to upgrade to junior colleges. The survey also finds that up till 2016, at least 2,000 3-year midwives graduated from this level of training.

**Figure 34: Universities and junior colleges offering 3-year midwifery training in Viet Nam, 2010-2021**




*Note: Six schools known to have junior college midwifery training in 2016 were missing information on when they started their programs. Information in the figure may undercount the number of schools as 35% of secondary schools and 22% of junior colleges did not respond to the survey about plans for introducing these programs.*

*Source: VMR 2016 survey.*

The number of facilities providing 3-year midwife training or with plans to introduce such programs is uneven across regions. Currently the Central Highlands region has no junior college or university-level midwife training in any of their medical schools, but does plan to introduce this program in a secondary medical school that has plans to be upgraded to a junior college in the 2017-2018 school year. In the Northern Midlands and Mountains only two provinces have junior college midwife training. A majority of medical schools at all levels are not providing any midwifery training, and a majority of provinces do not have junior college midwife training. This means that provinces providing 3-year midwife training will have to train students from neighbouring provinces, which may be problematic if tuition is subsidized through provincial budgets.

**Plans for training in response to Circular 26**

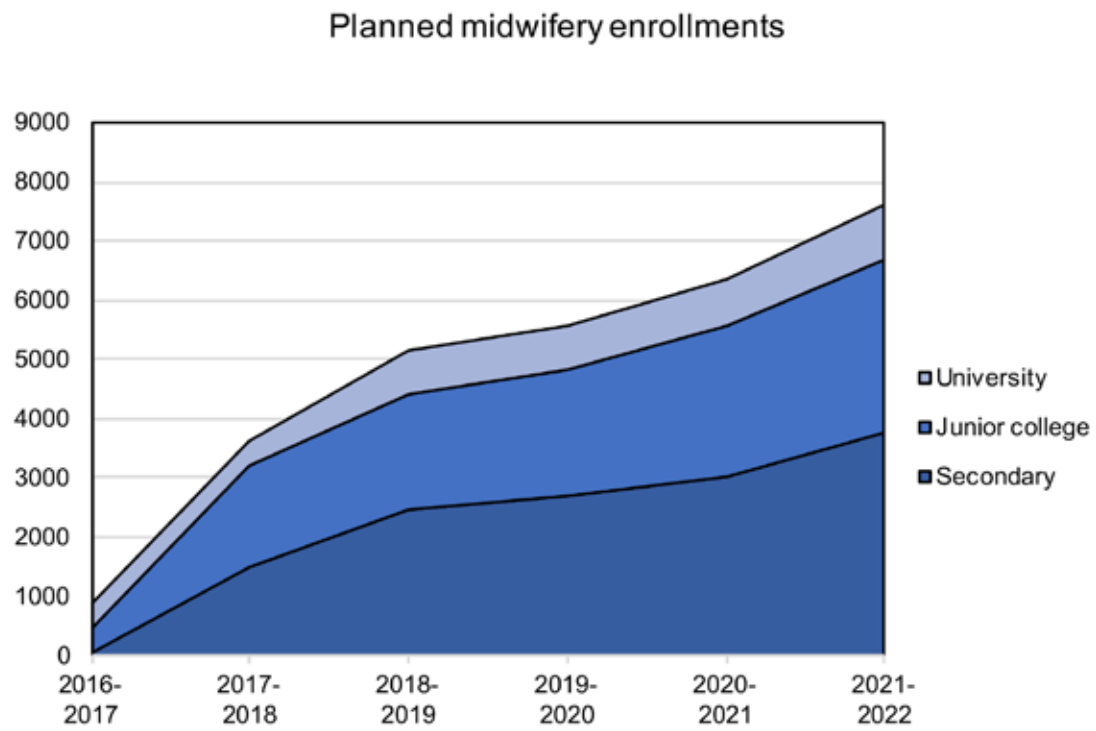
Approximately 33,000 secondary and elementary midwives (including OB-paediatric assistant doctors) need to be upgraded to 3-year qualifications by 2025. The plans of the medical school network to expand the number of facilities providing 3-year midwifery training show responsiveness to Joint Circular 26 as well as the need to increase the number of highly qualified midwives to serve reproductive health needs. Plans for pre-service midwife

student enrolments are also growing rapidly. It is concerning, however, that the planned enrolments in secondary midwife training do not show a tendency towards phasing out (Figure 35), which is what one would expect once newly graduated secondary midwives are no longer employable in the government sector starting in 2021. While the figures represent plans from the education supply side, they suggest that the implications of Circular 26 on employment of secondary midwives have not been widely disseminated to medical schools or to potential students.

Nevertheless, there is some evidence that students are already aware of this as indicated in actual enrolments in secondary midwife programs. Among the junior college and secondary medical schools who responded to the VMR 2016 survey, total enrolment into secondary midwife programs amounted to only 37 students out of an aggregate secondary midwife recruitment quota of 550 students in those same schools. It will take some time and a substantial amount of resources to upgrade the secondary medical schools to become junior colleges due to more rigorous requirements related to instructors, space, simulation labs, etc., designed to ensure quality of competency-based training (Decision 659/QD-BYT in 2015).

Even among junior college training institutions, the total quota for 2016-2017 enrolments listed in the recruitment document from MOET for the schools that responded to the survey indicated 850, but only 440 actually enrolled. Some schools recruited students but did not report any enrolments. This indicates that there may be excess capacity for providing upgrade training if these schools meet requirements. However, it is not clear why student demand is low compared to supply.

**Figure 35: Midwife training schools planned midwife student enrolments in Viet Nam, 2017-2022**

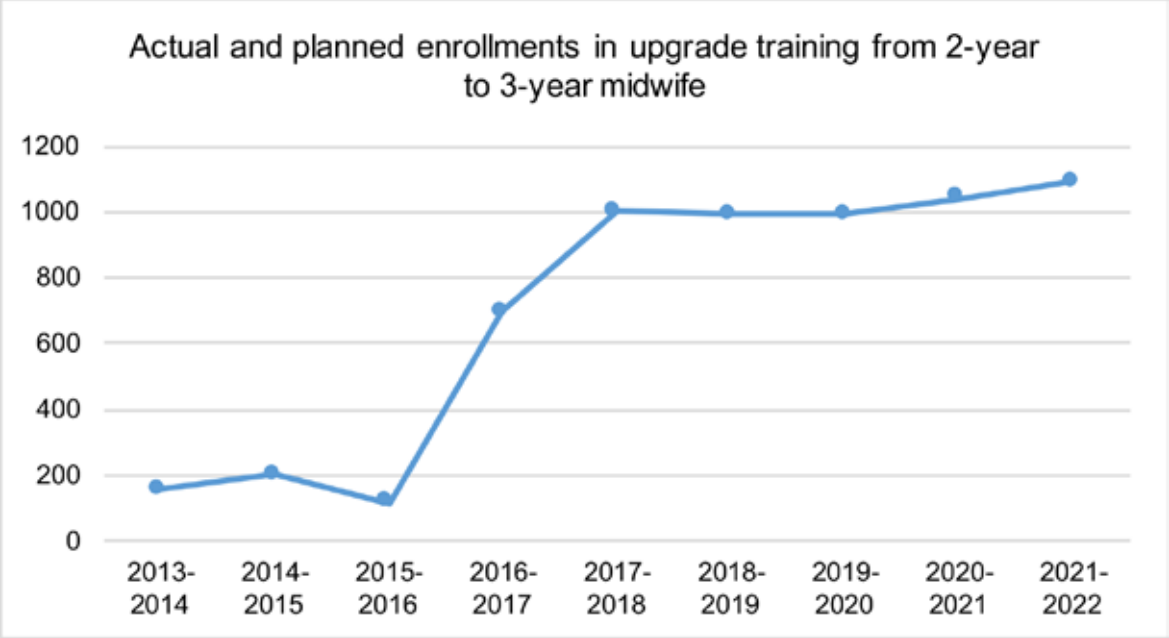



*Source: VMR 2016 Survey*

### Upgrade training

The more immediate need for midwife training over the next decade is training that allows currently employed midwives to upgrade their qualifications from secondary to junior college levels, which would allow them to obtain professional registration and continue practicing their profession in 2025 and beyond. Data in Table 10 above show that in 2013, there were approximately 32,800 government midwifery staff (including 24,135 secondary midwives, 7,902 OB-paediatric assistant doctors, and 763 elementary midwives) who will need to either retire or upgrade their qualifications to junior college or higher levels by 2025. The survey asked junior colleges currently providing 3-year midwife training what their plans were for providing upgrade training from secondary to junior college midwife qualifications. While some schools did not respond, and other schools not currently providing junior college midwife training may open up such programs in the future, the trend does not look promising if it is to meet these high retraining demands (Figure 36). It should also be noted that plans to provide upgrade training for OB-paediatric assistant doctors were not clear in the school's plans as they feel they lack authority to recruit this category of health worker into upgrade training to junior college midwife. It appears that the upgrade training takes 1.5 years, that it cannot be offered until a school has already graduated its first class of 3-year midwifery students, and that schools are limited to providing this type of training to the equivalent of 15% of their direct-entry midwife training quota.[24] This leads to a major concern about the feasibility of implementing the Circular 26 roadmap due to the still limited capacity of current and planned upgrade training for midwives in universities and junior colleges.

**Figure 36: Trends in actual and planned enrolments in midwife training to upgrade from secondary to junior college qualifications in Viet Nam, 2013-2021**




*Source: VMR2016 survey*

24 *Ministry of Education and Training Circular 55/2012/TT-BGDDT regulating upgrade training for junior college and university level and revisions found in Circular 8/2015/TT-BGDDT, as found in the integrated policy document (02/VBHN-BGDDT in 2015).*

### *3.2.5. Attractiveness of midwifery as a profession*

Although many factors influence an individual's choice to become a midwife, such as desire to work with babies, or coming from a family tradition where one's mother is a midwife, remuneration levels and the ability to find employment are major factors influencing this decision. Midwifery work often requires overnight shifts with women arriving at all hours of the day in labour and requiring attention. Many employers seem to want multi-purpose health workers like nurses rather than midwives, who are more specialized in maternity care, which may be a disadvantage for midwife compared to nurse graduates.

**Current income:** Public sector midwives of the same level of qualification and experience as nurses or technicians are paid at the same salary level (Circular 26). The current basic salary as of 1 May 2016 is 1,210,000 VND per month (Decree 47/2016/ND-CP). This basic salary is then multiplied by salary coefficients which depend on the level of qualifications and years of seniority (experience) (Table 12). All midwives directly serving clients are to receive an additional salary coefficient of 0.4 (Decree 56/2011/ND-CP). Additional salary supplements would be paid for those with leadership responsibilities (like chief midwife) (117/2016/NĐ-CP) or those working in disadvantaged regions (Decree 64/2009/ND-CP). An additional incentive payment is made to medical staff who have overnight duty. In the commune level, the additional payment for a 24-hour shift is only 25,000 VND, increasing to 65,000 to 115,000 VND at different class hospitals. There are additional payments made to midwives from the surplus taken in by the facility, and redistributed among the staff of the facility as "additional income". Additional services are often provided at public facilities for fees in addition to the official service prices and are not covered by health insurance, or by the government health staff after hours, such as helping the mother with bathing of the infant or episiotomy care after discharge from the health facility. Midwives and other health staff assisting at birth are also likely to receive gifts, such as fruit, cake, flowers, or even money, from mothers and their families, which can be an important income source. No information is available on actual incomes of midwives.

**Table 12: Basic midwife salary in Viet Nam, 2016**

| | Salary coefficient | Base annual salary including special 0.4 supplement | Base annual salary in USD |
|---|---|---|---|
| Midwife level II | 4.40 to 6.78 | 89 to138 million VND | 4,067 to 6,267 USD |
| Midwife level III | 2.34 to 4.98 | 48 to 101 million VND | 2,163 to 4,603 USD |
| Midwife level IV | 1.86 to 4.06. | 38 to 83 million VND | 1,719 to 3,753 USD |

*Note: The main distinctions between three levels of midwives are qualifications (Level II requires post-graduate, Level III requires university, and Level IV requires junior college or technical secondary qualifications) (Circular 26).*

*Source: Author calculation from above policies.*

VBAs are important members of the midwifery care team in remote mountainous regions inhabited by ethnic minority people. As stipulated in Circular 07/2013-MOH, VBAs are considered as a type of VHW. In 2015 there were 1,951 VBAs nationally. However, the policy on VHW stipends stipulated in Prime Ministerial Decision 75/2009/QD-TTg does not include VBAs. VHWs are entitled to a stipend equivalent to 0.3 or 0.5 times the minimum salary (4.4 to 7.3 million VND per year), with the higher amount being applied in remote areas where VBAs would work. The stipend for VHWs/VBAs is intended to boost the sustainability of VHWs in remote and disadvantaged areas by allowing deployment of up to two VHWs per village, and ensuring that their stipend is paid from state budget funding, (either local funding sources or from the central budget). However, the MCHD annual reports and various other studies indicate that only approximately 50% of VBAs, namely those also working as VHWs, benefitted from the stipend stipulated in Decision 75, while most of the remaining 50% of VBAs, who are not VHWs, receive very small subsidies of a few hundred thousand VND paid from national target program projects or donors, and some do not receive any payment. This is a cause of great concern because it may lead to a high drop-out rate among VBAs if they are not officially paid a government stipend.

### *3.2.6. Availability of midwifery services*

Ultimately, what is important is that women can access midwifery services from a competent professional, whether a midwife or someone else. Table 13 shows that there has been a significant increase in the availability of many reproductive health services in Viet Nam. In particular, between 2010 and 2013 the availability of MgSO4 in treating preeclampsia and eclampsia has more than doubled at district hospitals and increased by almost four times at commune health stations. Substantial increases are also evident in the availability of services for OB ultrasound, cervical screening, treating neonatal jaundice (almost doubling in this same period) and care of low birth weight infants (more than doubling). For ultrasound, service delivery may actually exceed the optimal level (see Section 3.3.5 below on balancing increasing access and avoiding overprovision).

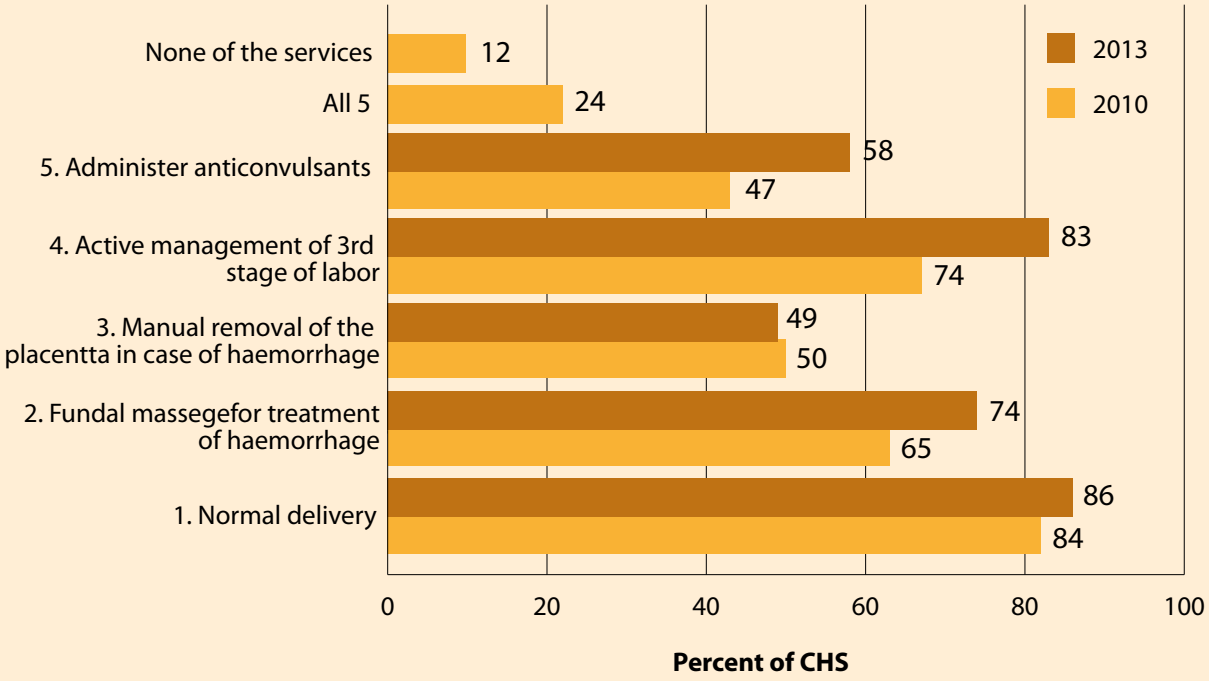
## Table 13: Availability of basic reproductive health services at the district and commune levels in Viet Nam, 2010~2013

| | Services provided | 2010 | 2013 | % increase 2010-2013 | % of facilities providing the service in 2013 |
|---|---|---|---|---|---|
| **Number of district hospitals providing:** | | | | | |
| 1 | C-sections | 406 | 465 | 15% | 67% |
| 2 | Blood transfu¬sion service | 356 | 388 | 9% | 56% |
| 3 | C-section and blood transfusion services (comprehensive essential OB care) | 328 | 373 | 14% | 54% |
| 4 | Emergency supracervical hysterectomy | 321 | 372 | 16% | 54% |
| 5 | Emergency ectopic pregnancy surgery | 387 | 425 | 10% | 61% |
| 6 | Use of MgSO4 | 260 | 566 | 118% | 81% |
| 7 | Vacuum extraction abortion up to 12 weeks of gestation | 374 | 489 | 31% | 70% |
| 8 | Care and treatment of healthy preterm newborns >1,500g | 160 | 394 | 146% | 57% |
| 9 | Neonatal jaundice treatment | 214 | 400 | 87% | 58% |
| 10 | Treatment for respiratory distress using Continuous positive airway pressure (CPAP) | 99 | 228 | 130% | 33% |
| **Number of commune health stations providing:** | | | | | |
| 1 | Birth attendance for cephalic presentation deliveries | 9 185 | 9 546 | 4% | 87% |
| 2 | Active management of 3rd stage of labour | 8 171 | 9 197 | 13% | 83% |
| 3 | Basic neonatal resuscitation | 8 542 | 9 435 | 10% | 86% |
| 4 | Fundal massage in case of haemorrhage | 7 110 | 8 247 | 16% | 75% |
| 5 | Vitamin K1 injection for newborns | 6 794 | 8 859 | 30% | 80% |
| 6 | Vacuum extraction abortion up to 7 weeks of gestation | 3 484 | 4 735 | 36% | 43% |
| 7 | Using MgSO4 in treating preeclampsia and eclampsia | 1 857 | 6 453 | 247% | 58% |
| 8 | Protein urine test | 2 072 | 8 187 | 295% | 74% |
| 9 | Cervical cancer early detection service using acetic acid (VIA) or Lugol's iodine (VILI) | 1 426 | 3 701 | 160% | 34% |
| 10 | Diagnostic OB ultrasonography | 742 | 1 853 | 150% | 17% |
| 11 | Specimen taking service for PAP Smear test, to forward to higher level | 940 | 2336 | 149% | 21% |

*Source: MCHD survey 2010 [20] and 2013 [5].*

In 2010, the MCHD assessed commune-level capacity to implement five OB emergency services that it was authorized to provide in MOH Decision 385/2001/QD-BYT [20]. Results indicated that only about one-quarter of commune health stations could provide all five services (Figure 37). A small share of commune health stations could provide none of these services, although it is likely these are in urban areas where hospitals are readily available and there is neither demand nor need for these services.

**Figure 37: Availability of basic essential emergency OB services at commune health stations in Viet Nam, 2010 and 2013**



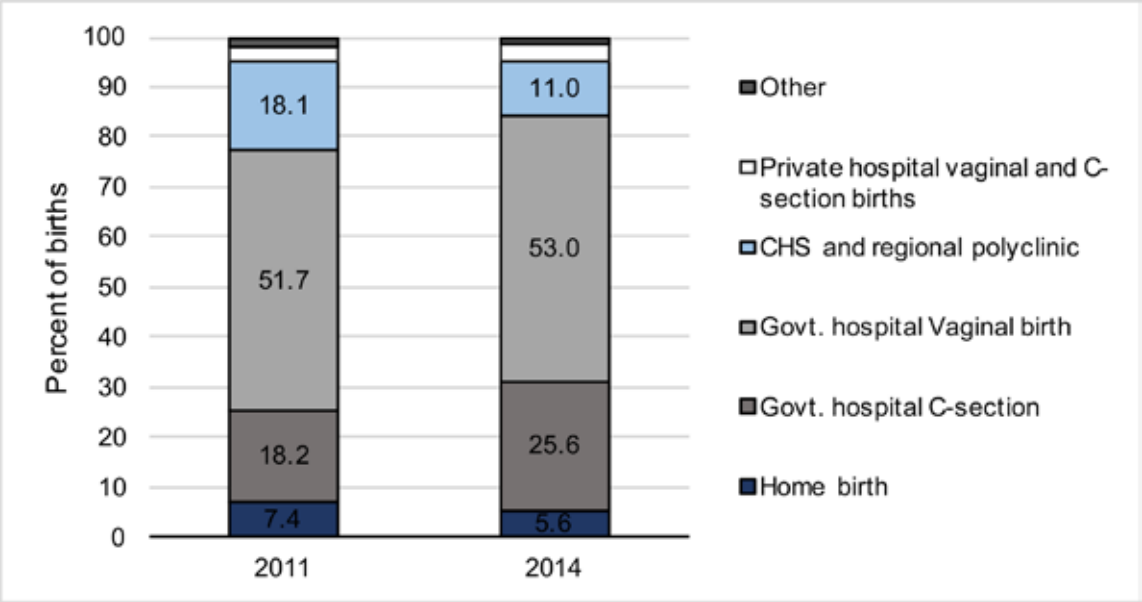

*CHS=commune health stations*

*Note: The 2013 survey did not tabulate whether all or none of the services were available.*

*Source: MCH survey 2010 and 2013 [5,20].*

The commune health stations are losing their function as a place for women to have a normal spontaneous birth. While services may be available at commune health stations, for various reasons they are not necessarily used. While historically commune health stations were the usual place for normal delivery, some informants interviewed for this report indicated that they have more confidence in the quality of services at hospitals, a view that is contributing to low use of commune health stations for delivery. Figure 38 shows that commune health stations are gradually losing their function as a place for women to have a normal spontaneous birth, despite its advantages of being close to home, allowing the companionship of family members, and permitting adequate time to let the birth take place naturally because there is no pressure from overcrowding. Instead, women are increasingly giving birth in overcrowded government hospitals, where they're more likely to receive unnecessary interventions including C-sections (the rate at government hospitals is high). Only a very small share of women are giving birth in private hospitals.

**Figure 38: Where are women giving birth in Viet Nam?**




*Source: MICS 2011 [7], MICS 2014 [6].*

### *3.2.7. Which midwifery services are available, and where they are provided within the reproductive healthcare system*

This section provides a more detailed picture of the availability of different types of services at different types of providers. The statistical details from the MCHD surveys in 2010 and 2013 can be found in Annex 6.

**At the household and in the villages: joint work of VHWs/VBAs and population workers**

Under direct management of the government health system, VHWs provide basic essential primary health care. The VHWs are expected to keep track of the population they serve and to coordinate care to meet their needs, although it is not clear how well they perform this task. In 2014, approximately 100,000 VHWs were working in 97.5% of all villages throughout Viet Nam, especially in rural and mountainous areas [12].

VBAs work in areas with a high concentration of ethnic minority people and provide mainly reproductive health services, with a focus on antenatal care; recognizing high risk pregnancies or complications during antenatal care, delivery, and in the postpartum period; and advising women to go to the commune health station for delivery or transferring women and newborns to health facilities when necessary. VBAs are also trained to provide assistance in normal delivery for home births, and provide other basic primary health care services. A report from 2014 indicated that 1,515 VBAs were working in 29 provinces covering 18% of disadvantaged villages.[25] About 50% of VBAs also serve as the VHW or population worker. Currently, implementation of the policy on VHW stipends (Decision 75/2009/QD-TTg) does not include VBAs, so they only receive the official stipend if they work dually as VBA and VHW.

Population workers are managed by the GOPFP. Most of the work done by population workers involves conducting information, education, and communication (IEC) activities at the household level, provision of non-clinical contraceptives including condoms and pills, nutrition monitoring,

25 *MCHD report "EMM Training and Utilization" in 2014.*

recording information to update the population database, and other public health functions.

There is some concern about how the MOH and GOPFP can effectively manage the collaboration, performance, and functions of the three different village-level health workforces to maximize their contribution at the village and household levels.

**Commune health stations**

Commune health stations are the lowest level medical facility in the hierarchy. In 2014, there were commune health stations in 11,101 out of 11,161 (99.4%) commune-level localities throughout the country. Some 98.2% of all commune health stations are served by a midwife or OB-paediatric assistant doctor, and 78.5% of all commune health stations are served by a doctor. Only about 50% of communes meet national benchmark standards (quality and capacity standards) for commune health [12].

Commune health stations provide pre-pregnancy services including detection and treatment of RTIs and STIs, HIV services, and, increasingly, cervical cancer detection, mainly through VIA/VILI [20]. Paraclinical services are not widely available at the commune health stations except for basic tests for detection of pregnancy and protein in urine, although the MCH survey showed that in 2010 approximately 7% of commune health stations had foetal ultrasound capacity, despite this service not authorized for commune health stations use in Circular 43/2013/TT-BYT [20]. The commune health station is a major provider of non-surgical family planning services. Only 42% of commune health stations have capacity to perform early vacuum aspiration abortion [20]. Antenatal care including tetanus vaccination and normal delivery capacity are widely available at the commune level. However, the percent of commune health stations dispensing iron and folic acid supplements (59.5%), or able to provide MgSO4 in case of pre-eclampsia or eclampsia (57.9%) or manual removal of the placenta (48.7%) in case of haemorrhage, is more limited. Capacity to provide an episiotomy (including sutures) is quite high (77.7% in 2010), but wound care for infected episiotomy site (62% in 2010) or ability to suture a 2nd degree perineal tear (54.2% in 2010) is more limited [20]. Basic elements of newborn care and examination and treatment of common diseases are almost all widely available at commune health stations, and coverage improved between 2010 and 2013; however, care of normal weight healthy newborns by commune health stations seems to be quite low, at only 61%. Commune health stations are a primary care facility with potential for providing midwifery care that closely matches the Midwifery 2030 vision, due to the close and continuous relationships midwives in the community can have with the women and infants they serve.

Commune health stations work closely with VHWs, VBAs, and population workers through monthly meetings, collecting reports, providing necessary backup for VHWs and VBAs, and supplying medical instruments and supplies.

**Regional polyclinics**

The regional polyclinic (or inter-communal clinics) is a facility that plays an intermediate role between the commune and district level, and in some cases is called the inter-communal polyclinic. In urban areas, polyclinics sometimes play the role of ward health station, as they can provide a wider range of services than commune health stations. In more remote areas, they may serve as a satellite facility for the district hospital and have inpatient beds. There are 544 of these facilities nationwide, but 14 provinces have no regional polyclinics [12]. Reproductive health services available at the polyclinic vary by locality. In some areas they are similar to those available in commune health stations, but with greater availability of most paraclinical services and abortion services, and in some areas lower availability of gynaecological services (RTI, STI, cervical cancer screening), contraception, antenatal and assistance at birth, and neonatal and child health care [20].

**Maternity homes**

***Maternity homes*** are another form of primary reproductive health service, for which little

information is available. It is known that there are 12 public sector maternity homes, and a number of private maternity homes, but no information is available about their range of services. The focus of services is on antenatal care and birth for low risk pregnancy and normal delivery.

**Private clinics**

***Private clinics*** provide a similar service mix to commune health stations, but may tend to have more technologies like ultrasound, and may have more limited scope of practice, e.g. no deliveries. There is little information about how many private clinics exist and what services they provide except for information obtained through household surveys. Women using private clinics tend to have a good continuity of care during antenatal care. Many private clinics also provide midwifery care, including specialized OB, paediatrics, and general practice clinics. Private services tend to be concentrated in urban areas, but otherwise little is known about them from existing statistical sources. The MSA facility licensing database should be able to provide detailed information about these facilities, including their scope of practice and personnel, in the future.

**Reproductive health departments of district health centres and provincial reproductive health centres**

Outpatient reproductive health services are also available from the reproductive health department of district health centres and at provincial reproductive health centres. In 2010 there were 687 district health centre reproductive health units in Viet Nam, increasing to 695 in 2013 [5]. As of 2016 there were 64 provincial reproductive health centres, corresponding to the number of provinces plus an extra one in Hanoi.

Information on service availability in these facilities comes from the MCH inventory in 2010 [20]. Ultrasounds are widely available in the provincial reproductive health centres and mobile units of these centres, allowing more specialized ultrasound services such as prenatal foetal anomaly screening. Availability is lower at the district health centres, likely because they are readily available at district hospitals. Mammograms and cervical x-ray screening are still not widely available. Basic haematology and urine lab testing is available in about two-thirds of provincial centres, but in only about half of the district health centres. HIV and hepatitis B screening with rapid tests appears to be widely available, although availability of testing for other STIs like syphilis and chlamydia was reported to be relatively low. Gonorrhoea testing was not mentioned in the report. Microscopy of vaginal discharge is relatively widely available for RTI diagnosis, while biopsy and cytology are not widely available. Diagnosis and treatment of general STIs and RTIs was widely available in both types of facilities in 2013, however HPV infection (genital warts) and cervical cancer screening are mainly available at the provincial level through PAP smear and colposcopy, while at the district level the main method is VIA/VILI, which is available in only half the districts. Services for women going through menopause are widely available at the provincial reproductive health centres.

Non-surgical contraceptive methods and surgical sterilization are available at the reproductive health departments of district health centres. Surgical sterilization and IUD insertion and removal are also available at the provincial reproductive health centres, as are a range of abortion services. In the district health centres, menstrual regulation is widely available, but abortions at later stages are less available. D&C (dilation and curettage) for late abortions is only available in about one out of four provincial reproductive health centres and does not seem to be available at the district level. Andrology services are available at the provincial level, along with infertility services. At the district level only about one quarter of all facilities have services for diagnosing and treating male infertility, and only 6% have capacity for sperm counting.

Pregnancy testing and antenatal care are both widely available at both district and provincial reproductive health facilities. Prenatal screening for foetal anomalies were readily available at the provincial level and in nearly half of district health centre reproductive health departments in 2010. While deliveries are not performed in either of these types of facilities, pregnant women are given advice on the kangaroo mother care method and on

breastfeeding. Child health care is widely available at provincial reproductive health centres, but not at the district level.

### District hospitals

***District hospitals*** consists of Class III and Class IV hospitals or hospitals not yet designated a class, and district health centres if they provide curative care services.[26] District hospitals are the first level referral facility for surgical services, thus playing an important role in emergency C-section surgeries and treatment of OB complications, especially in remote areas. They also provide important backstopping, supervision, and mentoring roles for the commune health stations. There were 629 district hospitals nationwide in 2014. Not every district has a hospital because some districts are in cities where provincial or regional hospitals are available, while other districts have been newly created and no hospital has been constructed yet. In some island districts, the population is too sparse to warrant having a hospital, and the population is referred to the district hospital in neighbouring districts. A few districts have more than one district-level hospital. District hospitals vary substantially in their capacity to provide services. Starting with the district level, the capacity for dealing with more complicated cases or utilizing higher technologies for diagnosis rises, but continuity of care and a trusting relationship between clients and service providers is much weaker. The district hospital scope of practice generally encompasses the full range of services that commune health stations can provide, plus a wider range of more technical services. Statistics on availability of services at the district hospital are from the MCH inventory in 2010 [20], although the inventory did not ask district hospitals about basic essential services, with the assumption that these would be availability in all district hospitals.

Pre-pregnancy care at the district hospital involves greater technical sophistication than at commune-level facilities according to statistics from the MCHD surveys in 2010 and 2013. District hospitals are a major provider of surgical sterilization, and some districts are moving into more sophisticated areas of infertility treatment. HIV screening and RTI/STI screening and treatment are widely available in district hospitals. However, capacity for diagnosis and treatment of genital warts or cervical cancer remain somewhat limited. Only about one-third of district hospitals can provide contraceptive implants while only 19% reported having emergency contraception (morning after pill). While some 57% of district hospitals report capacity for male sterilization surgeries, a surprising 71% reported capacity for female sterilization, a much more invasive type of surgery. Only about 30% of district hospitals had youth-friendly health services, while 77% could provide advice about menopause and 48% could provide services for victims of sexual violence. Infertility treatment using intrauterine insemination is only available in about two district hospitals, while andrology services are only available in about 10% of district hospitals. From half to two-thirds of district hospitals can perform major gynaecological surgeries like hysterectomy or removal of ovarian tumours, but only 5% are capable of endoscopic surgery [20].

District hospitals also have substantial pregnancy care capacity [20]. About 63% of district hospitals can perform late suction abortion and 51% can perform a D&C for pregnancies from 13 to 18 weeks. Paraclinical service capacity at district hospitals is substantially higher than at commune health stations. In 2010, about 71% of district hospitals were capable of a basic black and white ultrasound for foetal diagnosis. Yet many other district hospitals had intravaginal ultrasounds, 3D ultrasounds, or the capacity to use ultrasound for prenatal congenital anomaly screening and detection of high-risk pregnancy. Capacity for mammography or hysterosalpingography for detection of breast tumours or problems with fertility remain rare at the district level, which is to be expected as this level facility lacks specialized imaging staff and generally cannot provide treatment after detection.

Nearly all district hospitals could provide normal delivery and active management of the third stage

26 *The MOH has plans to integrate district hospitals and district health centers, so eventually they will all be district health centers with both curative and preventive care functions, including reproductive health.*

of labour, but only 45% could provide suction assisted birth and 39% could provide forceps assistance. However, 68% could provide C-sections. Some 66% of district hospitals indicated that they had capacity for providing mobile OB emergency services to lower levels. District hospitals generally have capacity to deal with all OB complications. By 2013, 67% of district hospitals could treat pre-eclampsia and eclampsia with MgSO4 [20].

Postnatal care for newborns with complications is not widely available at district hospitals. Only 27% had incubators for premature babies and 36% had bili-lights for treatment of neonatal jaundice, while only 17% could provide CPAP ventilation for newborns with respiratory difficulties [20].

**Provincial and central hospitals**

***The provincial level*** consists of Class II and Class III hospitals of the MOH, Class I and Class II hospitals of the province or other sectors that were not designated as leading tertiary hospitals.[27] These include general hospitals with OB and paediatric departments and OB and paediatric specialist hospitals. As provincial specialist hospitals are opened, many general hospitals lose their OB or paediatric department, since there are a limited number of specialist doctors in each province, making it difficult to operate two provincial-level OB or paediatric facilities. Provincial-level capacity varies substantially across provinces, with some provincial hospitals able to provide technical services on par with central hospitals, and others not providing much more than an urban district-level hospital [20]. The bulk of their clients are still uncomplicated normal births.

***At the central level*** are the tertiary hospitals, capable of providing high-level technical care in obstetrics and paediatrics, classified as special or Class I hospitals. These include Class I hospitals under the MOH, but also hospitals managed by provinces and other sectors that have been classified as Class I or special hospitals, and which have been designated by the MOH as leading tertiary hospitals. They provide the most sophisticated technical services, such as in vitro fertilization, complex OB/GYN surgeries, and cancer diagnosis and treatment. These hospitals are also overcrowded with many clients having common ailments or normal uncomplicated deliveries but who have greater confidence in the quality of care received at a higher-level hospital, even though they could obtain good quality care at lower-level facilities.

**Private hospitals**

Some private hospitals also provide various midwifery services from family planning and STI screening to abortion, antenatal care, childbirth assistance, and postpartum care. The level of technical sophistication varies across hospitals, with some providing basic normal delivery and C-section but referring more complicated cases, while others are introducing in vitro fertilization and other high tech services. Circular 43/2014/TT-BYT allows for the MOH or provincial health departments to assess the technical capacity and scope of services of each hospital to determine which level it is equivalent to in the government system. Only 3.9% of women gave birth in a private facility in 2014 [6].

### *3.2.8. Availability of medicines and medical equipment for providing midwifery services*

In addition to the availability of human resources, provision of midwifery services also requires that appropriate infrastructure, equipment, medicines, and medical consumables or devices are available for midwifery workers to provide services. This section briefly examines availability of these resources in Viet Nam, with a focus on commune health stations and regional polyclinics, and some basic referral services at district hospitals.

For medicines, both the essential drug list (45/2013/TT-BYT) and list of drugs covered by health insurance (40/2014/TT-BYT) are quite comprehensive in terms of basic drugs for midwifery services at commune and higher-level facilities. The problem seems to be related more to actual availability of drugs in health facilities.

27 *Thông tư số 43/2013/ TT-BYT ngày 11/12/2013 của Bộ Y tế quy định chi tiết phân tuyến chuyên môn kỹ thuật đối với hệ thống cơ sở khám bệnh, chữa bệnh (Circular 43/2013 issued on 11 December 2013 by Ministry of Health on technical task division and responsibilities for the examination and treatment network)*

Table 14 shows that commune health stations and regional polyclinics do not yet have universal availability of essential medicines for antenatal care, childbirth, or post-partum care, with a very limited share of commune health stations able to provide emergency care for pre-eclampsia or eclampsia due to low availability of MgSO4. Oral and injectable contraceptives and condoms are widely available at commune health stations, but are less available at the regional polyclinics, while IUDs are widely available in both types of facilities. Emergency contraceptive (morning after pill) is not widely available in either of these facilities.

**Table 14: Availability of basic medicines, contraceptives and equipment at the commune health stations and regional polyclinics in Viet Nam, 2010**

| Selected list of basic medicines, contraceptives and equipment | Commune health stations (%) | Regional Polyclinic (%) |
|---|---|---|
| Oxytocin | 86.4 | 87.1 |
| Iron and folic acid | 82.8 | 63.5 |
| Vitamin K1 | 66.1 | 78.2 |
| MgSO4 | 16.9 | 20.8 |
| Combined oral contraceptive | 82.8 | 45.5 |
| Progestin only oral contraceptive | 68.1 | 34.7 |
| DMPA injectable contraceptive | 76.7 | 47.3 |
| Emergency contraceptive | 18.3 | 7.6 |
| IUD | 83.3 | 73.7 |
| Condoms | 83.4 | 49.0 |
| IUD insertion/removal set | 48.9 | 48.2 |
| Single valve vacuum aspiration set for abortion | 18.4 | 28.8 |
| Full antenatal care equipment set | 0.5 | 3.1 |
| Full delivery assistance set | 52.7 | 47.5 |
| Full episiotomy set | 30.2 | 29.2 |
| Full newborn resuscitation set | 17.5 | 23.1 |

*Source: MCHD Survey 2010 [20]*

Equipment availability was assessed in terms of percentage of facilities having at least one full set of the equipment type. Clearly commune health stations and regional polyclinics fall short on basic midwifery-related equipment, including IUD insertion devices, abortion equipment, antenatal care and childbirth equipment, and neonatal resuscitation equipment. It is alarming that basic antenatal care equipment is not widely available at commune health stations.

At district hospitals, which serve as a first-level referral facility, it is important that equipment be available for emergency OB care and neonatal intensive care. The 2010 MCHD inventory indicated that the CPAP respirator was only available in about 14% of these facilities [20]. Since 2010, substantial investments have been made in neonatal care equipment at district hospitals, but an update on the equipment situation could not be located. Still, the availability of CPAP services at district hospitals increased from 16.6% to 32.8% and treatment of jaundice increased from 36.0 to 57.6% from 2010 to 2013. Statistics on availability of NICUs at the district level indicate an increase from 47.9% of district hospitals to 61.6% in this same period [5,20]. However, this figure is misleading as few (only 12.7%) of those facilities actually serve more than 10 premature, underweight, or disabled infant patients in a year, suggesting that maintenance of knowledge and skills for treatment of these cases is likely to be weak [5]. The crucial emergency OB service needed at the district level is the capacity to perform C-sections. In 2010, 71.6% of district hospitals had equipment to perform this surgery, while 68.2% of facilities actually performed C-sections [20]. In 2013, hospitals indicating inability to provide C-section surgery reported multiple reasons, including lack of operating theatre or equipment, as well as availability of alternative facilities for this service or lack of trained medical staff [5].

## 3.3. Accessibility

Accessibility is the next step in the assessment of effective coverage for midwifery services. Essential services may be widely available, but not used by women due to geographic, financial, cultural/stigma), or other factors. Thus, there is an implicit understanding that there is a need for these services, and that those who do not use them (access them) have unmet need. When unmet need is detected, the next step is to analyse barriers to access, in efforts to understand why needs remain unmet. The final section in this chapter aims to raise awareness of a more recent phenomenon – overutilization of unnecessary services. Overutilization is increasingly widespread, even in rural areas, and is the result, to some extent, of a rapid expansion in availability of services and increased financial access and societal demand, along with inadequate controls to ensure provided services are appropriate. Detailed discussion about access to services, unmet need, and barriers to access among unmarried adolescents and youth and ethnic minorities can be found in section 3.4 on Acceptability.

### *3.3.1. Major achievements in midwife service accessibility*

Major achievements in relation to accessibility of midwifery services include increased uptake of antenatal care and assisted delivery services, and the efforts made to improve financial accessibility to reproductive health care services (Table 15).

**Table 15: Significant achievements since 2010 affecting the accessibility of maternity services in Viet Nam**

| Achievement | Evidence | Data source |
|---|---|---|
| Growing use of antenatal care and its components | Universal use of antenatal care by Kinh women and growing use among ethnic minority women. | MICS survey 2011 and 2014 |
| Improvements in access to trained assistance at birth | Nearly universal use of trained birth assistance among Kinh women and growing use of trained birth assistance and C-section among minority women. | MICS survey 2011 and 2014 |
| Actions to improve financial accessibility to essential midwifery interventions | Continued expansion of health insurance coverage among reproductive age women and newborns.<br><br>HIV-related services incorporated into health insurance coverage. | Viet Nam Household Living Standards Survey (VHLSS) 2010 and 2012<br><br>Review of regulations |

*Note: VHLSS 2014 data had not been released by GSO in time for inclusion in this report.*

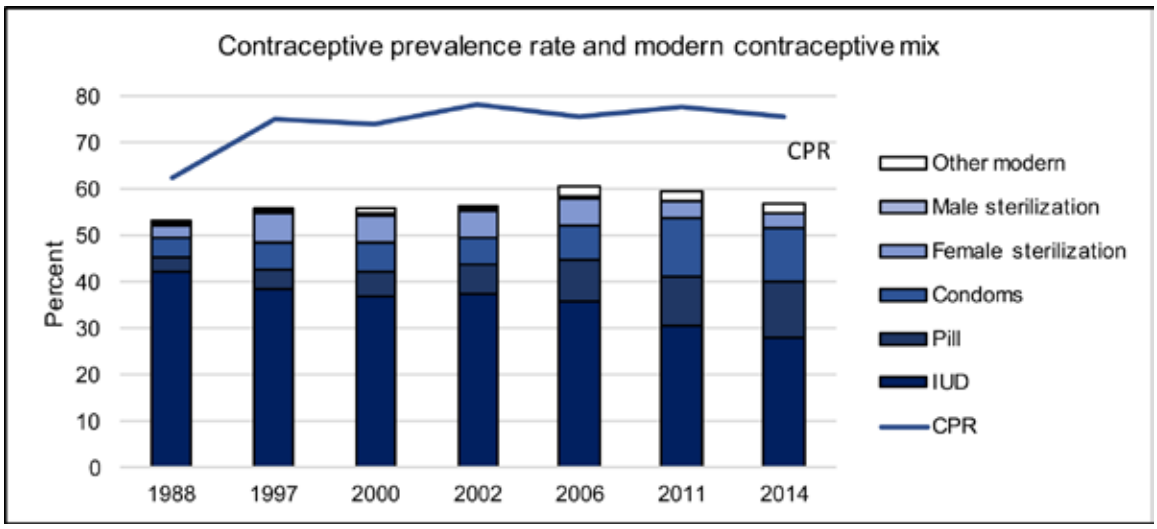
### *3.3.2. Actual access to and use of midwifery services*

Vietnamese women have relatively high access to midwifery services, based on an assessment of existing data sources. This section examines actual utilization of selected services in the pre-pregnancy, pregnancy, birth, and post-natal service areas. The respective sets of indicators used to illustrate the situation are contraceptive use and early childbearing, aspects of antenatal care, assistance at delivery, and breastfeeding practices. Figures illustrate not only trends over time, but also ethnic disparities. The authors chose to focus on the ethnic disparities because ethnic minority people tend to live in remote and disadvantaged regions, and have had lower opportunities for pursuing education. The ethnic minority disaggregation reflects multi-dimensional disparities. Many ethnic minority women are disadvantaged due to geographic isolation, lower access to education, and poverty. Many also marry and begin childbearing early. Public policies have specifically targeted ethnic minority women, such as by deploying VBAs in remote areas with high proportions of ethnic minority populations.

**Pre-pregnancy services**

Marital contraceptive prevalence in Viet Nam is relatively high and the contraceptive mix has become more diversified over time (Figure 39). Unmet need for family planning is defined as the percentage of women aged 15-49 years currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception. The unmet need was measured at 4.3% in 2011 [7], and increased to 6.1% in 2014 [6].

**Figure 39: Marital contraceptive prevalence rate and modern contraceptive mix in Viet Nam, 1988~2014**



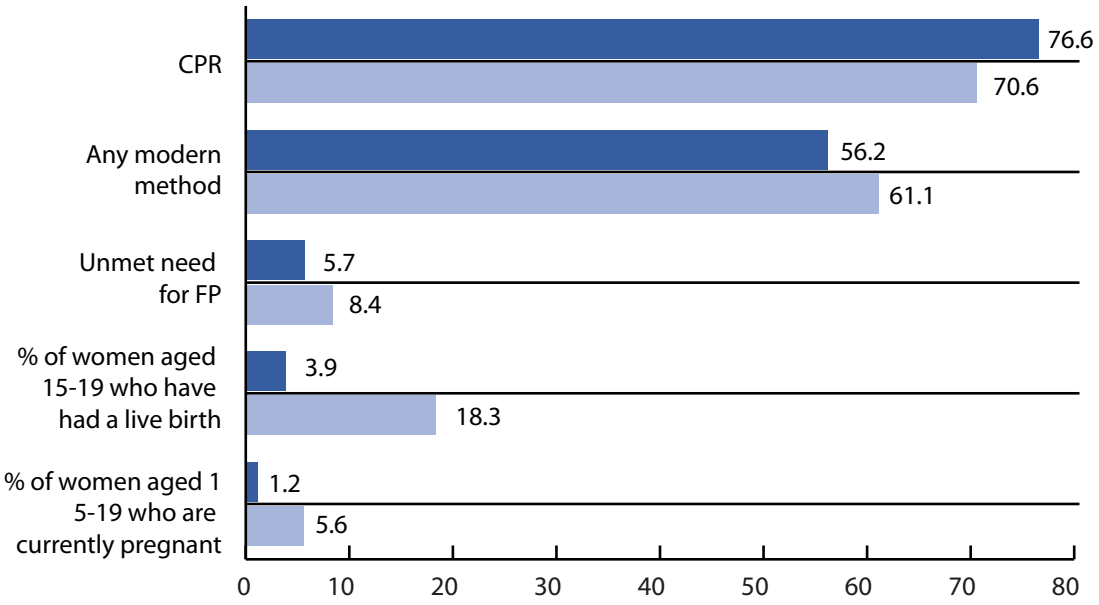

*Note: CPR is contraceptive prevalence rate including both modern and traditional contraception methods.*

*Source: 1988 DHS [114], 1997 DHS [115], 2000 MICS [116], 2002 DHS [117], 2006 MICS [118], 2011 MICS [7], 2014 MICS [6].*

Overall contraceptive prevalence rates among married women are higher among the Kinh majority than among ethnic minorities, though ethnic minority women have a higher prevalence of using modern forms of contraception.

However, early childbearing is much more common among ethnic minority women than among the Kinh majority and their unmet need for family planning is also higher (Figure 40).

**Figure 40: Ethnic disparities in marital contraceptive use and adolescent childbearing in Viet Nam, 2014**



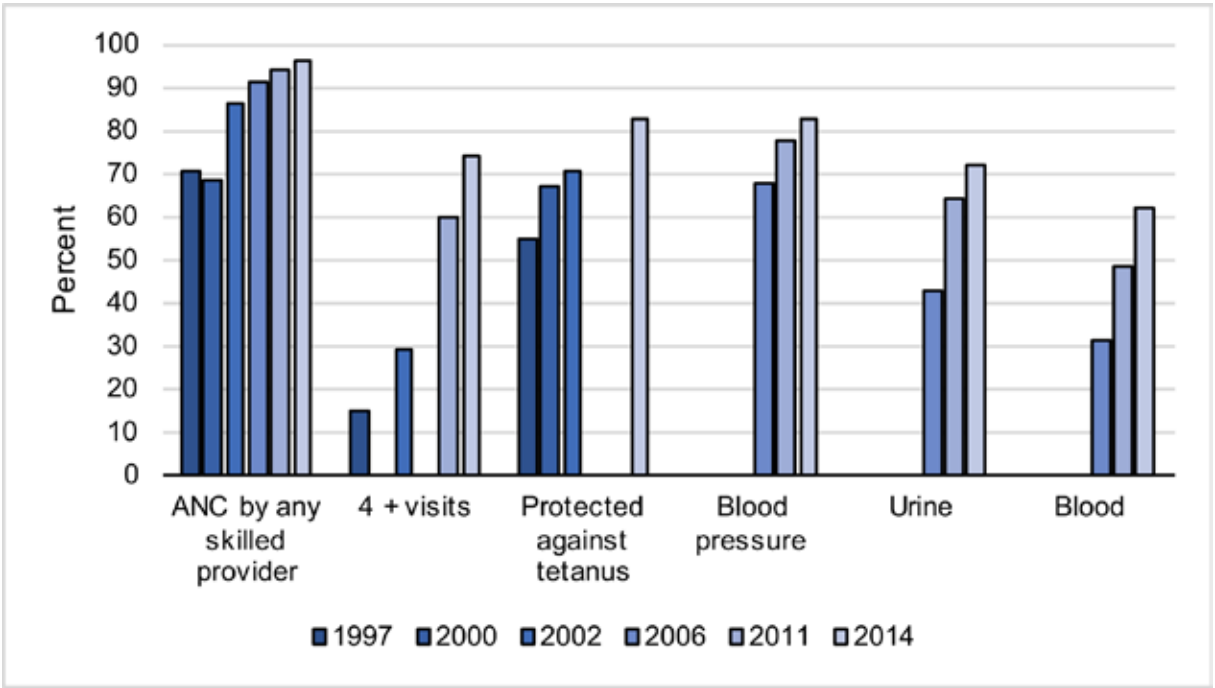

*Source: MICS 2014 [6]..*

Among adolescents aged 15-24, modern contraceptive prevalence is estimated at 50.5% and the unmet need at 30% [194]. While this group is not the main target of population workers or commune health station efforts to promote family planning, the expansion of youth-friendly services is helping to expand access to contraceptive services in this group. It is also likely that many unmarried individuals obtain family planning methods directly from pharmacies (condoms and contraceptive pills).

### Services during pregnancy

Viet Nam has been very successful in increasing antenatal care service use overall and in terms of items included in the antenatal service package, including the share of women having 4 or more antenatal care visits, being protected against neonatal tetanus, and having blood pressure, urine, and blood tests as part of their antenatal care package, elements that are important for identifying risk factors during birth (Figure 41). In addition, by 2014, folic acid supplementation was reportedly used by 88.5% of pregnant women [6]. However, according to the MICS survey 2014, the percentage of women aged 15-49 years who had a live birth in the past two years and received antenatal care, and who also said that they were offered and accepted an HIV test during antenatal care and received their results was only 30% [6]. According to MCH statistics, 31% of women giving birth had received a HIV test prior to or during their pregnancy, while 54% received an HIV test during delivery [23]. This means that for the majority of women, the screening was too late to provide the full benefits of PMTCT interventions, which should take place early in the pregnancy.

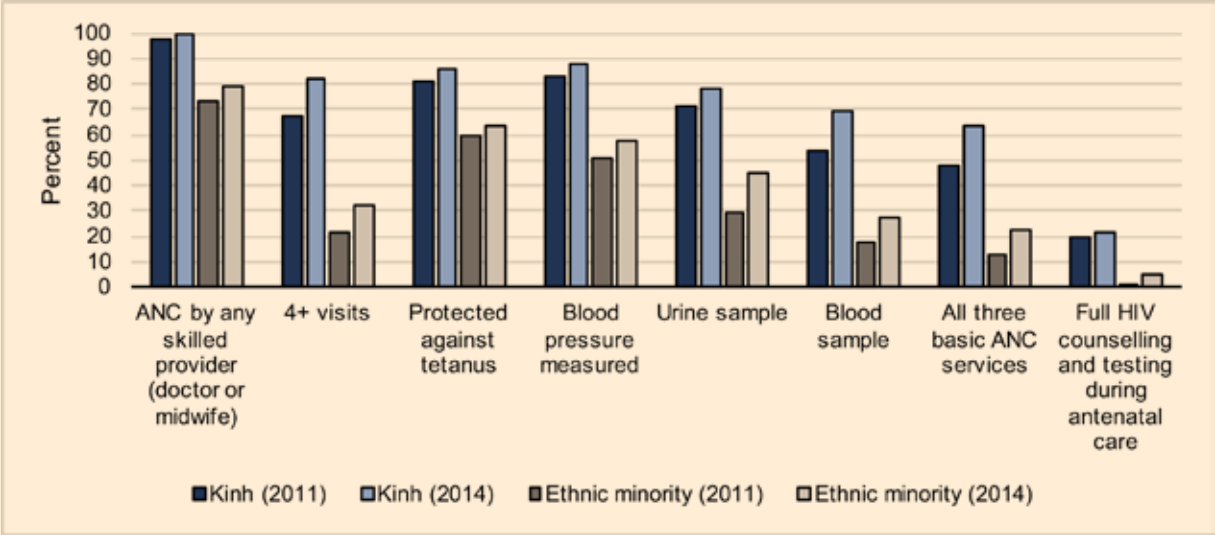
**Figure 41: Trends in antenatal care service use in Viet Nam, 1997~2014**




*Source: 1997 DHS [115], 2000 MICS [116], 2002 DHS [117], 2006 MICS [118], 2011 MICS [7], 2014 MICS [6]..*

Improvements in access to antenatal care and different components of care have been seen for both Kinh women and ethnic minority women. However, substantial underservicing exists in antenatal care, hindering the ability of providers of midwife services to detect risk factors during antenatal care that could inform choices for safe childbirth (Figure 42).

**Figure 42: Ethnic disparities in antenatal care service use in Viet Nam, 2014**

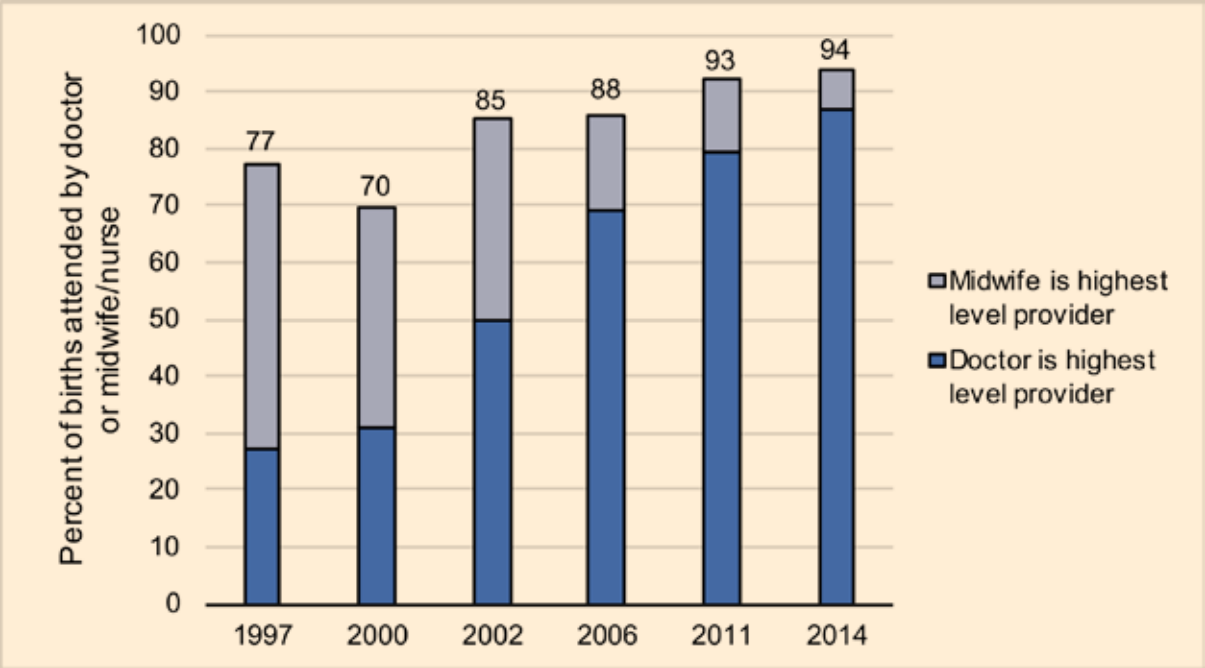



*Source: MICS 2011 [7] and MICS 2014 [6]..*

### Services during childbirth

The share of births attended by a trained provider has increased steadily over time in Viet Nam, but the trend also reflects a substantial medicalization of delivery services. In 1997 midwives or nurses were the highest level provider for most births, and now the vast majority of births are attended by a doctor (3).

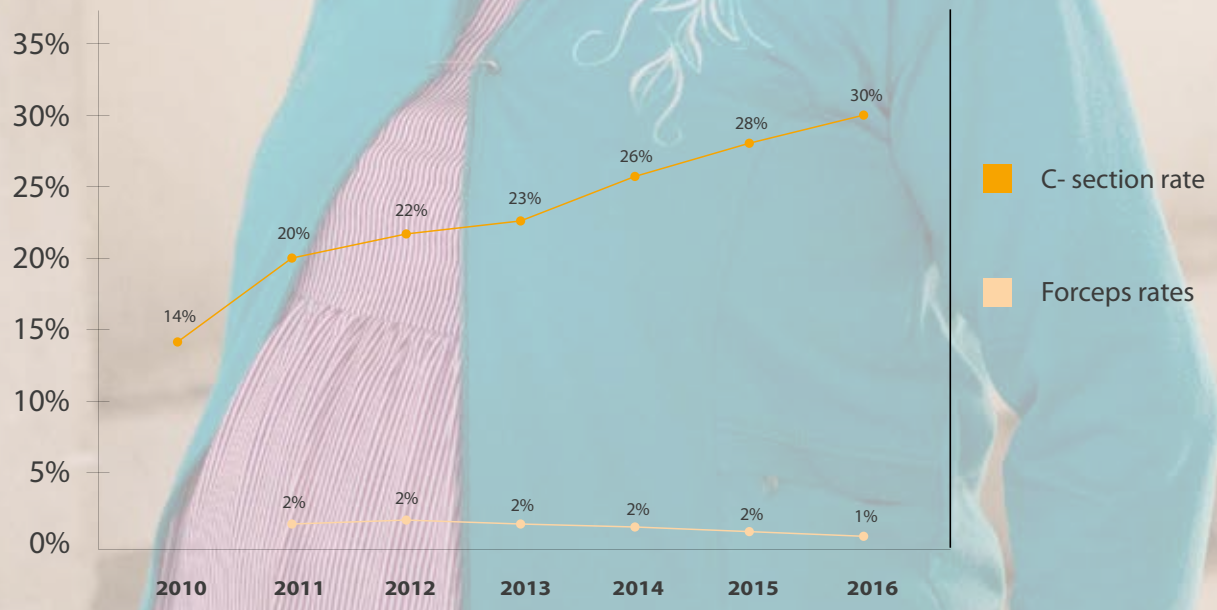
**Figure 43: Trends in delivery services in Viet Nam, 1997~2014**




*Source: 1997 DHS [115], 2000 MICS [116], 2002 DHS [117], 2006 MICS [118], 2011 MICS [7], 2014 MICS [6].*

Alongside the growing share of births managed by doctors, intervention rates have also grown rapidly. Figure 45 shows how C-section rates increased from 14% to 30% over a period of only six years in public facilities (as reported by the MCHD), with the fieldwork revealing that some hospitals have a C-section rate of 50-60%. The MICS found a C-section rate in 2013-14 of 27.5%, up from 20% in 2011; this is broadly consistent with the MCHD figures [6,7]. C-sections are more prevalent in private hospital births (45%) compared to public hospital births (32.6%) [6], although only 3.9% of births occur in private hospitals.

**Figure 44: Trends in C-section and forceps delivery rates in Viet Nam, 2009-2015**



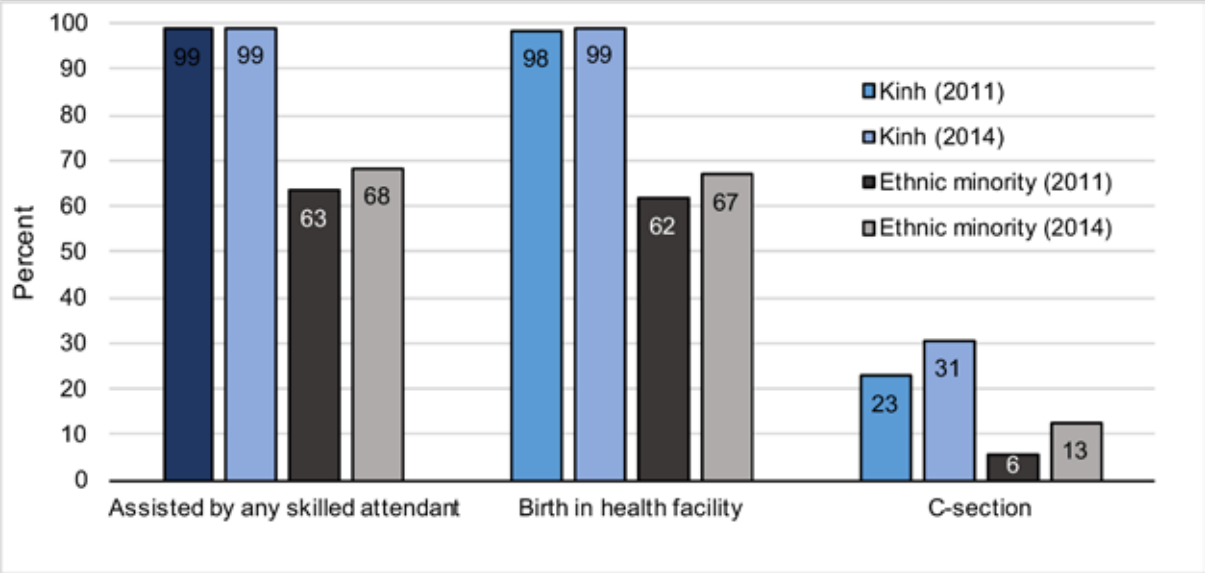

*Note: No information was available on vacuum delivery.*

*Source: MCH Statistics. Table 1/BMTE-V Report on MCH care activities for various years.*

Access to skilled attendance and birth in health care facilities has reached nearly universal levels for Kinh majority women, while only about two-thirds of ethnic minority women have access (Figure 45). Some improvement has been seen, with access rising from 63% to 68% between 2011 and 2014 among ethnic minority women.

For C-sections, ethnic minority women have increased access from a level that was probably too low (6%) in 2011, to a more optimal level of 13% in 2014. On the other hand, the already high rate of C-sections in Kinh majority women has worsened, reaching the level of 30% of all deliveries.

**Figure 45: Ethnic disparities in trained assistance at birth and C-section rates in Viet Nam, 2014**




*Nguồn: MICS 2011, MICS 2014*

**Post-partum care for mothers and post-natal newborn care**

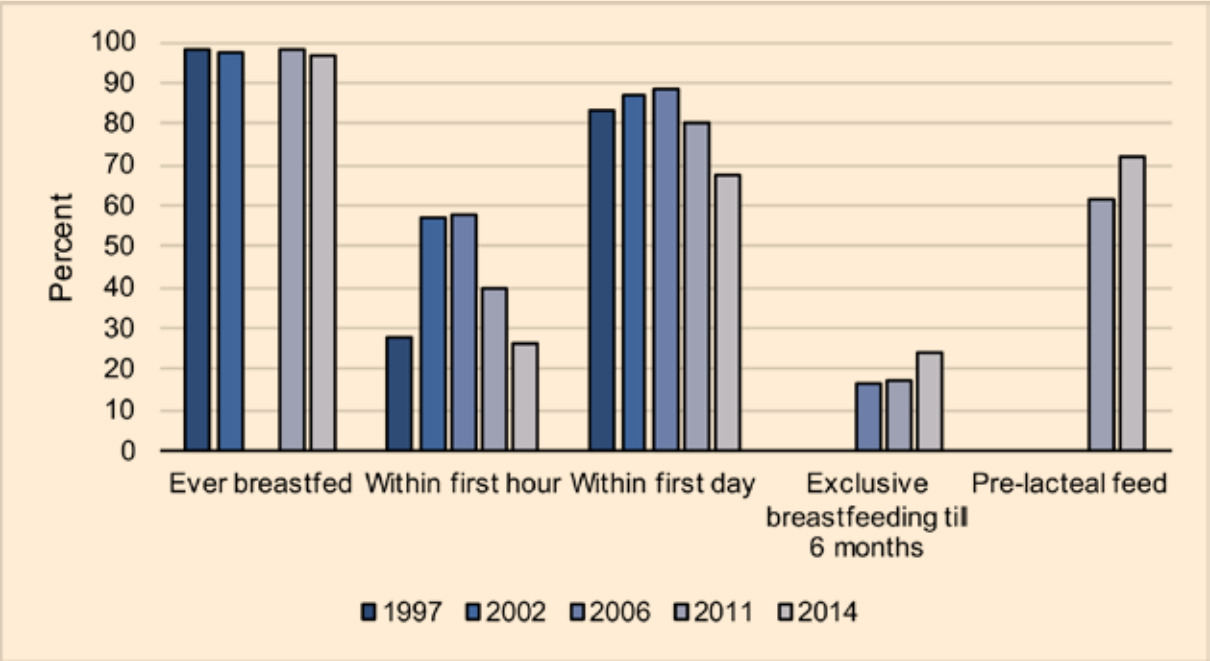
Some concern was expressed by stakeholders during the development of this study that many women and newborns are not receiving adequate postpartum and postnatal care. The MICS 2014 survey found that 27.4% of women giving birth in a medical facility in Viet Nam stayed from one to two days postpartum, and another 70.6% stayed for three or more days. This is the crucial time for midwives to provide postpartum and neonatal care to prevent maternal deaths occurring during the first 24 hours after birth. This is done by monitoring the mother, detecting haemorrhage or infection, and following up on eclampsia care. The 2012 maternal mortality audit found that a majority (59%) of maternal deaths occurred within 24 hours after giving birth, with another 29.5% occurring from two to 42 days after giving birth [119]. This is also a crucial period to provide care for preterm infants, detect neonatal sepsis, and ensure that breastfeeding has been initiated and stabilized.

Besides the care provided at the health facility, follow-up care to check on the health of mother and newborn after returning home is also important, particularly for conditions like jaundice or infection, whose symptoms may not have appeared before discharge from the facility. MICS 2014 shows that 88.9% of newborns in Viet Nam received a health check-up before leaving the facility or before the provider left the home in a home birth. However, a majority of newborns (74.7%) received no further postnatal care visits. Importantly, for children born at home, only 14.8% had a health check following birth performed by the birth attendant before leaving, with an additional 0.5% having follow-up health check-ups later. Only 63% of ethnic minority newborns had any postnatal check-ups compared to 94.5% of Kinh women. Postpartum care for women showed similar patterns: 89.7% of women had a postpartum check at the facility but 79.6% had no further postpartum follow-up visits. For home births, only 17% included a postpartum health check before the provider left the home, and 98% had no further post-partum visits [6].

Appropriate breastfeeding is a crucial factor affecting child survival and lifelong health,

and an area where midwives can have a strong influence on maternal behaviour through counselling during antenatal care and providing support immediately after birth. While a high proportion of Vietnamese babies have been breastfed, recent trends have indicate declines in breastfeeding within the first hour and within the first day, with very low rates of exclusive breastfeeding till 6 months (the WHO recommendation), and high and rising rates of providing foods other than mother's milk to a newborn before initiating breastfeeding (called "prelacteal feed" in Figure 46). It is positive to see that there has been a slight increase in exclusive breastfeeding rates at six months, albeit very small.

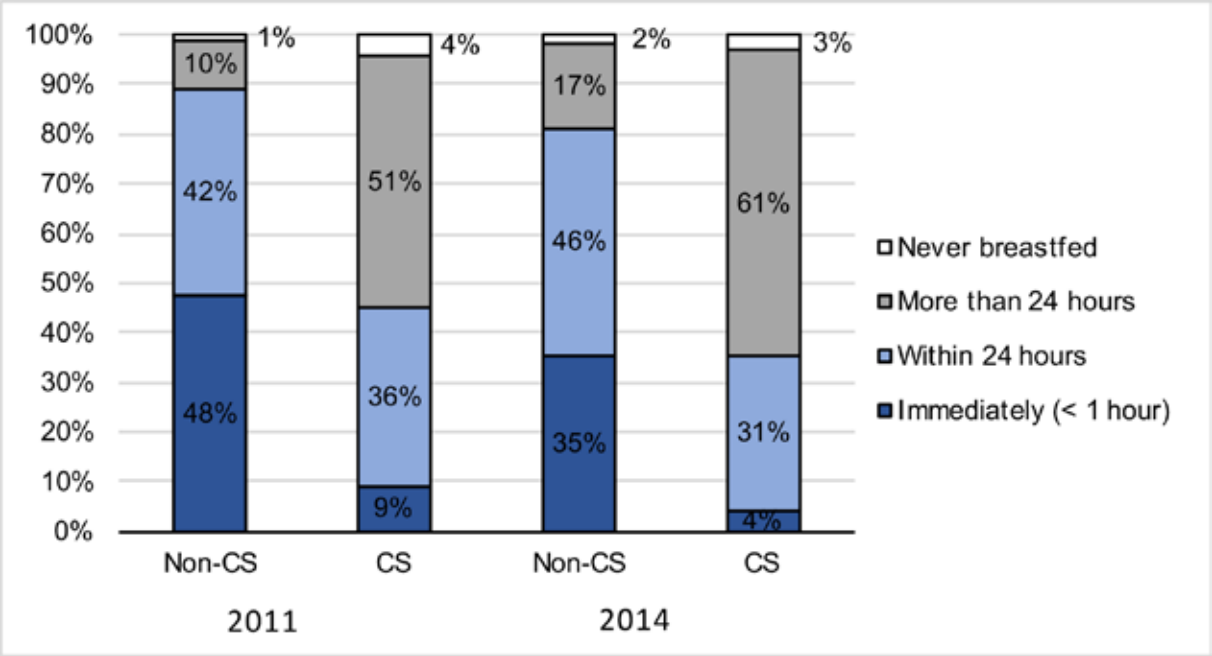
**Figure 46: Breastfeeding trends, 1997~2014**




*Source: 1997 DHS [115], 2002 DHS [117], 2006 MICS [118], 2011 MICS [7], 2014 MICS [6].*

Suboptimal breastfeeding practices have been well documented in Viet Nam [120–129] and it has been a priority of the health sector to intervene to improve this indicator. A breastfeeding advocacy program called Alive & Thrive was launched in Viet Nam in 2009 to try to boost optimal breastfeeding. By 2014, the programme had reached more than 2.3 million mothers of children under the age of two through mass media, community support groups, and counselling at health facilities. The health sector has also put in place bans on advertising of breastmilk substitutes marketed for children under 24 months of age, while the government approved the extended paid maternity leave for 6 months [130]. Despite these efforts, declines in breastfeeding have continued since 2006. This has occurred around the same time as a doubling of the C-section rate. Among women who deliver by C-section, only 10% initiated breastfeeding immediately in 2011, and this rate declined to 4% by 2014. At the same time, more than 53% of these women did not initiate breastfeeding until more than 24 hours after birth in 2011, increasing to 63% by 2014. This is strong evidence of an association between delivery by C-section and failure to initiate breastfeeding early (Figure 47).

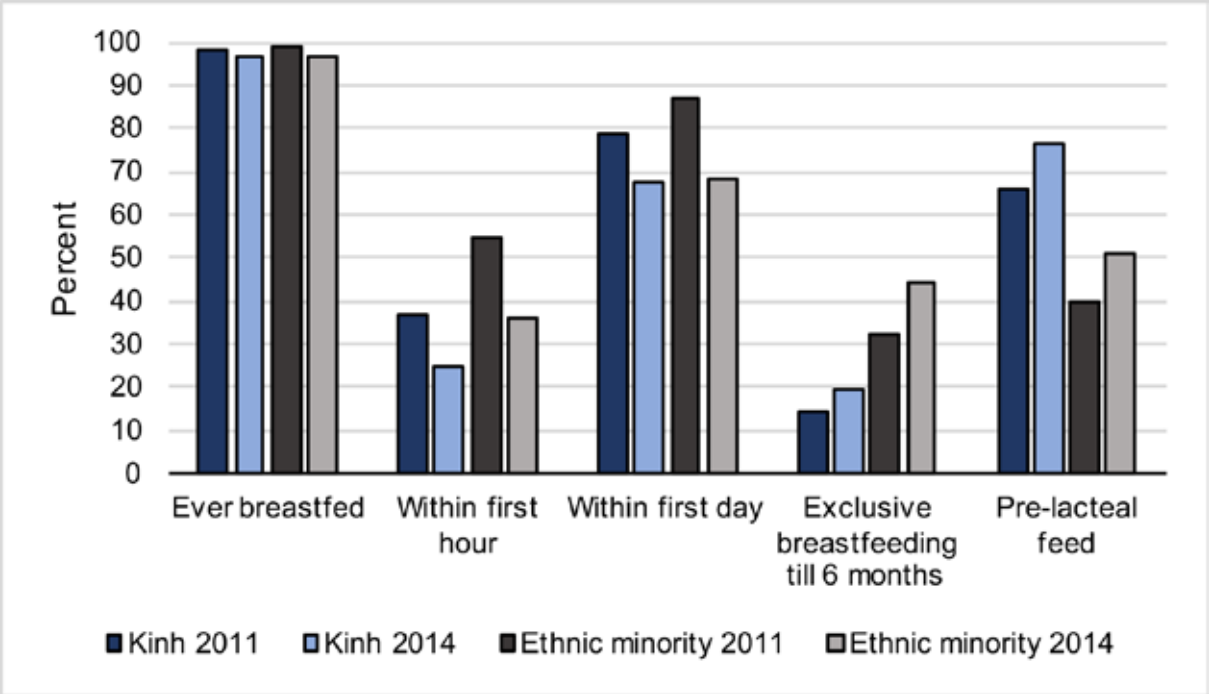
**Figure 47: Timing of first breastfeed by mode of delivery in Viet Nam, 2011~2014**




*Source: Author calculation from MICS 2011 [7] and MICS 2014 [6] datasets.*

While most Vietnamese mothers have breastfeed their children, ethnic minority women have generally healthier breastfeeding practices than Kinh women, with earlier initiation of breastfeeding, higher rates of exclusive breastfeeding for 6-months, and less tendency to provide foods other than mother's milk before initiating breastfeeding (Figure 48). However, the trends for both groups indicate declines in early initiation of breastfeeding and increased pre-lacteal feeding. It is promising to see growing rates of 6-month exclusive breastfeeding, although rates are still lower than 50%, and the rate for Kinh women is only 20%.

**Figure 48: Ethnic disparities in breastfeeding practices in Viet Nam, 2014**




*Source: MICS 2014 [6].*

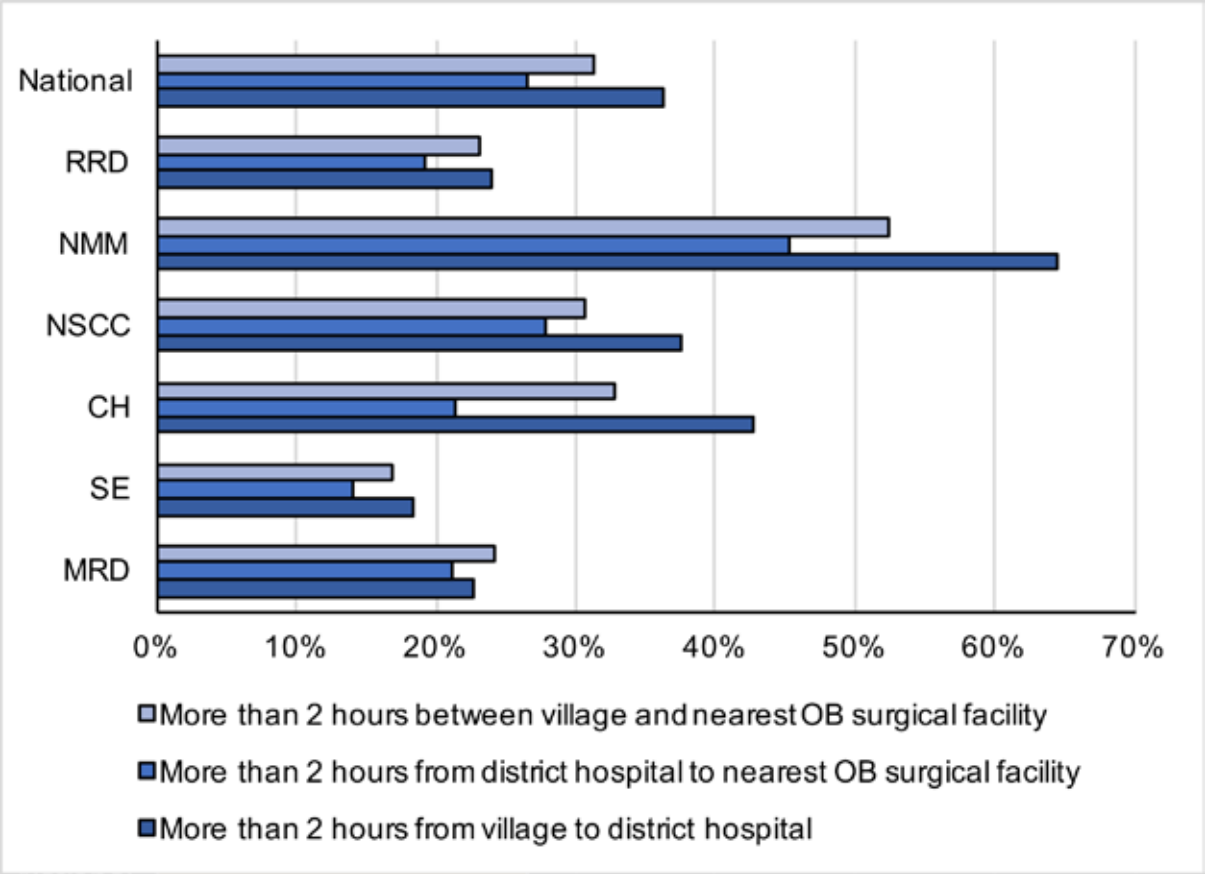
### *3.3.3. Non-financial barriers to access*

While access to basic services has improved enormously in Viet Nam, geographic barriers to accessing services remain substantial in disadvantaged areas, and this is reflected in the ethnic differentials in access to basic reproductive health services presented above (and discussed in detail in Section 3.4 Acceptability below).

For reducing maternal and neonatal mortality, access to emergency OB care is essential, yet substantial geographic barriers remain, particularly for women giving birth at home (Figure 49). In the Northern Mountains and Midlands region, more than 65% of villages have a travel time of more than two hours to reach the nearest district hospital, and over half require more than two hours to travel between the village and nearest OB surgical facility. During delivery at the primary level, if complications occur, timely transfer to a hospital setting with OB surgery capacity can be crucial to ensure healthy mother and child outcomes.

Geographic barriers are not the only ones delaying or limiting access to care. Stigma and low education are important barriers, particularly for STI and HIV care and treatment. A substantial share of women failed to seek care for STIs (36%) in 2013, by either ignoring symptoms or self-treating. Lack of knowledge and/or misperceptions and stigma have contributed to women not seeking care [131,132]. Low education and residence in rural and remote areas are associated with delays in seeking care for RTI symptoms, and women in these categories also tend to have lower knowledge about STI transmission routes, and engage more in sex while symptomatic than women who did not delay in seeking care [133]. Negative attitudes among clinicians about STIs are likely to hinder care seeking for people with STIs [36], particularly among youth and unmarried women.

**Figure 49: Percentage of districts in Viet Nam with geographic barriers to emergency OB surgery, 2013**




*Source: MCHD survey 2013 [5].*

Midwives were found to have somewhat higher knowledge about STIs than other health workers, but knowledge of STIs among health workers remains low [35]. It has also been noted that the number of women living with HIV whose disease is reported in the health information system is substantially lower than the HIV infection rate in the population. This is often due to a lack of knowledge of risk or lack of access to friendly, non-stigmatizing services [39].

### *3.3.4. Financial barriers to access and health insurance coverage*

Viet Nam's social health insurance policy and various state subsidized national health programs provide, in principle, a substantial amount of financial protection to women seeking SRMNH services. This section first examines the officially set user prices of some basic reproductive health services, in order to understand the potential financial burden of using these services. Second, the section examines the health insurance regulations on which items are covered and which are excluded from the package. Third, the section examines existing policies on state subsidies for various health programs. The section ends by examining qualitative studies on the extent that financial barriers influence access to SRMNH services.

#### Prices for selected reproductive health services

For people who have to pay for health care out-of-pocket, high prices can hinder access to health services, especially if referral care is needed or if primary care services are inadequate. A detailed list of technical medical services with

the government administered prices is available in Joint Circular No. 37/2015/TTLT-BYT-BTC. The mix of services available at different levels of the system is determined in Circular 43/2013/TT-BYT. As of 2016, the fees per technical service were the same across all levels and types of facilities. However, in addition to technical services, patients have to pay for drugs, medical consumables, and bed days for inpatient care. The bed day fees vary by level of facility and department of the hospital, with intensive care and post-op tending to have higher costs than general clinical departments. The cost of drugs and consumables tends to be greater at higher-level facilities because more drugs are prescribed and the ones prescribed tend to be more expensive.

Table 16 indicates that technical service prices (the prices charged to health insurance or patients paying out-of-pocket) vary substantially depending on the mode of service provided in response to reproductive health care needs. While it is preferable that health providers offer only the services needed by patients, evidence in almost every country indicates substantial responsiveness of providers to price incentives. Thus, while it may be possible in principle for Vietnamese women to get a foetal ultrasound for the low price of 49,000 VND (black and white 2D ultrasound), the incentives in place have led many facilities to only offer or to encourage women to use 3D ultrasound (costing on average 446,000 VND) for substantially higher fees with no or little additional diagnostic advantage. This may make these services unaffordable to some patients, and create a substantial drain on the health insurance fund.

Financial accessibility is also affected by restrictions on the types of facilities where services are authorized for provision, since higher-level facilities involve higher transport costs, bed day costs, and have more expensive inputs to care. According to the classification of services by level of facility (Circular 43/2013/TT-BYT), some services are only authorized to be provided by special tertiary referral hospitals (A), and Class II MOH hospitals and Class I and II provincial hospitals not designated as tertiary referral hospitals (B). Some are also offered at district hospitals, regional polyclinics, and maternity homes (C), while a few are offered even at commune health stations (D). If a service is provided at the commune level, but not according to Circular 43, it is not likely to be covered by health insurance, unless an exception has been granted. Obviously, highly specialized services must be provided at higher-level facilities because of their greater range of equipment, drugs, and expertise, but as capacity improves over time, reassessment should take place to avoid unnecessarily restricting access to services at facilities closer to home when local facilities have the capacity to provide them effectively.

## Table 16: Fees for core midwifery technical services in Viet Nam, 2016

| Services | 2016 prices | Availability |
|---|---|---|
| **STI Tests** | | |
| Normal bacterial culture (gonorrhoea, trichomoniasis, chlamydia) | 230,000 | AB |
| Automatic system for bacterial culture (gonorrhoea, trichomoniasis, chlamydia) | 287,000 | AB |
| Chlamydia (rapid test) | 69,000 | ABCD |
| Chlamydia (automatic or semi-automatic IgG antibody test) | 172,000 | AB |
| Treponema pallidum rapid test (test) | No price | ABCD |
| Treponema pallidum RPR qualitative (syphilis) | 36,800 | AB |
| Treponema pallidum RPR quantitative (syphilis) | 83,900 | AB |
| Sterilization services | | |
| Female sterilization through small incision | 2,728,000 | ABC |
| Endoscopic female sterilization | 4,568,000 | ABC |
| Ultrasound | | |
| Basic black and white ultrasound | 49,000 | ABC |
| Intravaginal ultrasound | 176,000 | ABC |
| 3D Real time Colour Doppler ultrasound for cardiovascular disease (also known as 4D ultrasound) | 446,000 | AB |
| **Abortion services** | | |
| Medical abortion to less than 7 weeks (drug is additional charge) | 177,000 | ABC |
| Vacuum aspiration abortion less than 7 weeks | 358,000 | ABCD |
| Medical abortion from 7 to 13 weeks (drug is additional charge) | 283,000 | Missing |
| Vacuum aspiration abortion from 6 to 12 weeks | 383,000 | ABC |
| **Birthing assistance services** | | |
| Normal delivery | 675,000 | ABCD |
| Forceps or suction delivery | 877,000 | ABC |
| Breech delivery | 927,000 | ABC |
| Twin and other multiple birth | 1,114,000 | ABC |
| Primary C-section | 2,223,000 | ABC |
| Second and subsequent C-section | 2,773,000 | AB |
| Vaginal birth after C-section | not available | |

*Notes:*

*A: special tertiary referral hospitals*

*B: Class II MOH hospitals and Class I and II provincial hospitals*

*C: district hospitals, regional polyclinics, and maternity homes*

*D: commune health stations*

*Source: Joint Circular No. 37/2015/TTLT-BYT-BTC*

The health service price policy states that items included in the service should not be charged as extra to the patients, and prices were set with the intention that health service prices should cover all labour and materials costs. Yet hospitals are able to charge patients additional amounts for items such as better quality sutures and medical consumables that should be included as part of the service, such as the dressing to cover the C-section surgical wound. Starting in 2006 (34/2006/QD-BYT) and updated in 2009 (06/2009/TT-BYT), the MOH has been detailing the various medical consumables and medicines needed for various types of reproductive health services (Table 17). This ensures a high level of transparency in understanding what is covered in the package and a clear justification for setting prices of services. For example, from these lists it is clear that the antenatal care package does include pregnancy tests, folic acid supplements, protein in urine tests, and tests for infection if a woman has vaginal discharge, but does not include ultrasounds, STI screening, HIV screening, or treatment of RTI.

However, for most services there remains substantial ambiguity. Comparison of the Circular 43 list of technical services and the level where they can be provided, the Circular 37 list of service prices, and the list of services in Circular 06/2009/TT-BYT indicates a large number of services for which no price exists, no list of cost components, and in some cases a price without a corresponding service listed in Circular 43 (Table 18). Similar inconsistencies exist with regard to abortions. Many of the names of these services in the National Reproductive Health Care Guidelines (2009) are inconsistent with the names of services in both circulars 37 and 43, which adds to the ambiguity.

**Table 17: List of services for which detailed component cost items are available (Viet Nam)**

| |
|---|
| **Safe motherhood care** |
| Antenatal care |
| Tetanus vaccine for pregnant woman |
| Normal vaginal delivery (includes examination prior to birth) |
| Cord care and immediate postnatal care of newborn |
| Amniotomy |
| Urinary catheterization during birth |
| Episiotomy |
| Forceps delivery |
| Suction assisted delivery |
| Manual removal of the placenta (do not include additional norms for fundal massage) |
| Fundal massage |
| Augmented labour |
| First day postpartum care of mother |
| **Family planning and gynaecological exam** |
| Treat RTI (yeast, trichomonas, bacteria) |
| Gynaecological exam |
| VIA, VILI examination of cervix |
| IUD insertion (including gynaecological exam) |
| Normal IUD removal |
| Difficult IUD removal |
| Contraceptive injection |
| Contraceptive implant |
| Removal of contraceptive implant |
| No-scalpel vasectomy |
| Female sterilization through small incision |
| **Abortion** |
| Vacuum aspiration abortion from 6 to end of 12th week |
| Medical abortion up till 49 days |
| Medical abortion from 50 to 63 days |
| Medical abortion from 13 to end of 22nd week (either misoprostol only or combined with mifepristone) |
| D&C abortion from 13 to 18th week |

## Table 18: Inconsistency in service lists and price lists for antenatal care, birthing and abortion services in Viet Nam

| Service name | Price set in Circular 37 | Service listed in Circular 43 | Service listed in Circular 6 |
|---|---|---|---|
| ***Antenatal care*** | Missing | x | x |
| ***Birthing services*** | | | |
| Breech birth | x | x | Missing |
| Normal birth | x | x | x |
| Multiple birth | x | x | Missing |
| Forceps or suction birth | x | x | x |
| Epidural pain relief during birth | x | x | Missing |
| Induce labour with drugs | Missing | x | Missing |
| Augment labour with oxytocin drip | Missing | x | x |
| Monitor foetal heart rate and contractions using OB monitor | Missing | x | Missing |
| Episiotomy | Missing | x | x |
| Active management of 3rd stage of labour | Missing | x | Part of normal delivery |
| Deliver and check placenta | Missing | x | Part of normal delivery |
| Fundal massage | Missing | x | x |
| Manual removal of placenta | Missing | x | x |
| Apply dressing for episiotomy wound infection | x | x | Missing |
| External cephalic version | x | x | Missing |
| ***Postpartum and postnatal care*** | *Missing* | *Missing* | *x (First day)* |
| ***Abortion services*** | | | |
| Ultrasound guided abortion | x | x | Missing |
| Abortion with endoscopic control | Missing | x | Missing |
| Abortion + sterilization through small incision | Missing | x | Missing |
| Abortion using D&C from 13th to 18th week | x | x | x |
| Medical abortion from 13th to 22nd week | x | x | x |
| Medical abortion from 7th to end of 13th week | x | Missing | x |
| Medical abortion up till end of 7th week | x | x | x |
| Medical abortion till end of 9th week | Missing | x | Missing |
| Medical abortion for foetus up till end of 8th week | Missing | x | Missing |
| Kovacs procedure | x | x | Missing |
| Vacuum aspiration abortion from 6th to 12 week | x | x | x |
| Vacuum aspiration abortion up till end of 7th week | x | x | Missing |
| Abortion for disorders of the pregnant woman or foetus | Missing | x | Missing |
| Abortion for clients with old C-section scar | Missing | x | Missing |

**Health insurance coverage**

Health insurance coverage is a primary instrument being used to ensure financial access and financial protection for women and children who need reproductive health and MCH services. In Viet Nam's Health Insurance Law (10/VBHN-VPQH), Article 21 on examination and treatment of disease states that, "periodic antenatal care and delivery services" are covered by health insurance (10/VBHN-VPQH in 2015). However, coverage of "screening for early diagnosis of disease" was dropped in the 2014 revision of the Health Insurance Law. The law also stipulates exclusions from health insurance reimbursement (Article 23), including items paid through other government programs, pregnancy tests *"without intention to treat",* use of fertility treatments, family planning, abortions *"except when termination of pregnancy is required due to disease of the foetus or pregnant mother",* treatment of addictions (drugs, alcohol or tobacco), and *health checks* (which is likely to mean that postpartum and postnatal health check-ups are excluded from health insurance coverage).

Health insurance does not reimburse services used at home. Most women giving birth at home are ethnic minority women in disadvantaged regions with health insurance coverage. However, they cannot benefit from their insurance if they are unable to make the long journey to a health facility for antenatal care or delivery services. Postpartum and postnatal care are provided during confinement in a medical facility, but follow-up visits that may be received at home are not eligible for health insurance reimbursement, which may contribute to low utilization of postpartum care services after discharge, increasing the risk that any complications that arise will not be detected in time. This may also hinder important postnatal care for newborns as well, particularly further encouragement and guidance for breastfeeding and use of vaccination services.

While health insurance does provide some financial protection for people seeking reproductive health services, there remains some ambiguity in how entitlements are interpreted and implemented in the localities. Much reproductive health involves screening, including screening for sexually transmitted diseases, screening for problems of the mother and foetus during pregnancy, and post-natal screening. Important questions include which screening items are often covered by existing state subsidized programs, which are included in the definition of antenatal care, and which are considered non-essential and therefore the responsibility of the people to pay out-of-pocket?

While RTI/STI screening is supposed to be included in the National Target Program for Health and Population 2016-2020 (in the reproductive health component), the amount of funds allocated is too little to actually cover all RTI/STI screening in Viet Nam. In particular, are all antenatal ultrasounds covered by health insurance as part of antenatal care, or are there reasonable guidelines on when they are reimbursed? What does "intention to treat" mean when referring to pregnancy, since pregnancy is not a disease? What constitutes disease of the foetus or pregnant mother, which would entitle the woman to health insurance reimbursement of abortion? It seems unlikely that the delivery service package covered by health insurance includes postpartum follow-up check-ups at home or in a facility within the first week and up to 42 days after birth, and this may be hindering uptake of such services.

In addition to ambiguity regarding which technical services are covered by health insurance, there is also some ambiguity about whether drugs, consumables, and other cost items are covered at the price set for each service. For example, when a woman is given a C-section, does the price include the cost of sutures and wound dressings? When a woman receives an episiotomy, does the price include lidocaine, sutures, and prophylactic antibiotics?

Social health insurance coverage in Viet Nam is growing. The Law on Health Insurance

entitles all children under 6 years of age to fully subsidized health insurance. Poor women and disadvantaged ethnic minority women are also given free health insurance. Many other women obtain health insurance through their employment or voluntarily contribute the premiums to ensure coverage. In 2012, the proportion of WRA with health insurance was 55%, while reported insurance coverage for children under age one was 85%.[28] It is likely that the insurance coverage rates have increased since then as overall insurance coverage has risen. Women with health insurance have co-payments that vary depending on the type of coverage: poor women have no co-payments, the near poor make a 5% co-payment, and the rest pay 20% of charges as a co-payment. Additional co-payments may arise for items not covered by health insurance, such as services obtained in private wards of a public facility or in a private facility, or for items the health facility considers outside the basic package of a given technical service. Thus, health insurance coverage only gives a rough sense of actual coverage, which impacts financial accessibility.

**Other state funding of reproductive health services**

While health insurance covers a wide range of services and pharmaceuticals, it does not cover items that are covered by other state budget funding sources. Historically, Viet Nam has implemented a wide range of national programs, providing family planning, HIV/AIDS services, immunizations, nutrition counselling, and other items for free when delivered in state facilities, particularly at the grassroots level. Many of these programs received substantial amounts of external assistance funds, particularly for HIV/AIDS. Service delivery at the grassroots implicitly targets these budget funds on the poorer part of the population for essential preventive medicine, infectious disease control, MCH, and reproductive health services. In recent years, reduced external assistance funds and limited budget have led to some scaling back of programs. While the target program for health and population will continue to the year 2020, the newer strategy relies more on social mobilization to pay for costs, rather than state subsidies. In some cases, like HIV/AIDS, there has been a shift from the national program funding modality towards health insurance coverage. Some service delivery components are also changing from a silo approach to a more integrated approach, such as counselling and testing for HIV in health facilities (01/2015/TT-BYT) and new HIV/AIDS management and treatment guidelines (3047/QD-BYT (2015) that permit dispensing of ARV drugs at commune health stations for patients on stable treatment regimens at the district level. In the past, provision of contraception through state facilities was free, including IUD insertions, sterilization, condoms, pills, and other methods. Due to budget constraints, subsidies have been reduced and are now targeted on disadvantaged or high fertility groups.

The health insurance regulations state clearly that items covered by other state budget funding sources are not reimbursable by health insurance. However, it is not always clear what other programs are funded by state budget funding sources. Table 19 shows the latest documents about national health programs related to SRMNH. Many programs covered the period up to 2015, but no documents are available for the 2016-2020 period to either indicate whether these programs (and funding) have been terminated or continue, and which items are currently funded.

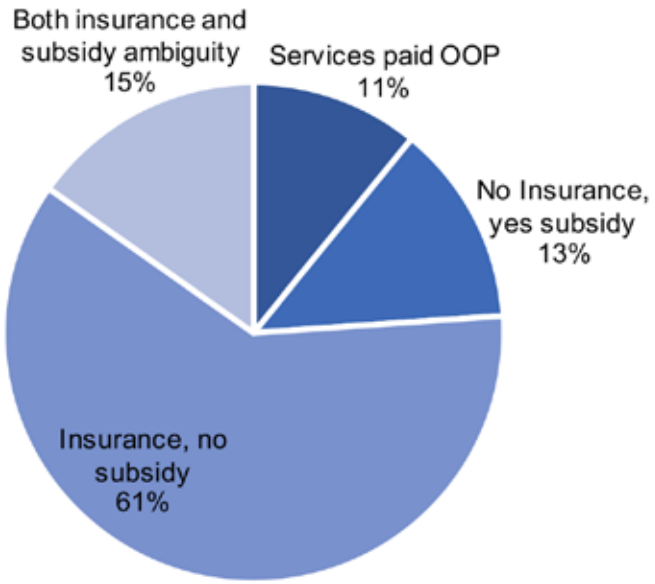
28 *Author's calculation using the VHLSS 2012 data.*

## Table 19: Policies related to state or other sources of funding for reproductive health services in Viet Nam

| Policy code | Policy | 2016-2020 period covered? |
|---|---|---|
| **General National Target Programs** | | |
| Joint Circular 113/2013/ TTLT-BTC-BYT 15 August 2013 | Management and use of funds for implementing the national target programs for health in the period 2012-2015. | No |
| Government Resolution 73/ NQ-CP 26 August 2016 | Approval of the policy to invest in national programs for the period 2016-2020. Includes national target program for health and population and target program for investing in development of local health system. | Yes |
| **Family planning** | | |
| Joint Circular 20/2013/TTLT-BTC-BYT 20 February 2013 | Stipulating the management and use of funds to implement national target programs on population and family planning 2012-2015 | No |
| Joint Circular 25/2013/TTLT-BYT-BTC | Stipulating the financial management regime for implementing social marketing for contraceptive methods, and methods to prevent HIV and STIs. | Yes |
| MOH Decision 818/QD-BYT 12 March 2015 | Approval of the project on "Social mobilization to provide contraceptive methods and reproductive health services in urban and developed rural areas for the period 2015-2020." | Yes |
| MOH Decision 2169/QD-BYT 27 June 2011 | Issuing the overall market plan for contraception in the National Target Program for Population and Family Planning. | No |
| **STIs/RTIS/HIV** | | |
| MOH Circular 15/2015/TT-BYT 26 June 2015 | Guiding implementation of insured medical services for people living with HIV and people using HIV/AIDS-related services. | Yes |
| Prime Ministerial Decision 1202/QD-TTg 31 August 2012 | Approval of the National Target Program on Prevention and Control of HIV/AIDS for the period 2012-2015. | No |
| Ministry of Culture, Information and Tourism Decision 2859/QD-BVHTTDL 17 August 2010 | Approval of the plan to implement the Condom program for prevention of HIV and STIS in tourist businesses for the period 2010-2015. | No |
| MOH Decision 03/2007/ QD-BYT 15 January 2007 | Approval of the action plan to prevent and control STIs to the year 2010. | No |
| **Other programs** | | |
| Prime Ministerial Decision 468/QD-TTg 23 March 2016 | Approval of the project to control imbalance in the sex ratio at birth for the period 2016-2025. | Yes |

For this report, each of the 46 essential midwifery services in the SoWMy report were assessed for eligibility for health insurance reimbursement or state subsidies in Viet Nam. Figure 50 roughly quantifies the structure of financing for these 46 essential midwifery interventions selected as priorities in the SoWMy 2014 report.

**Figure 50: Financing sources for 46 essential midwifery interventions in Viet Nam, 2016**

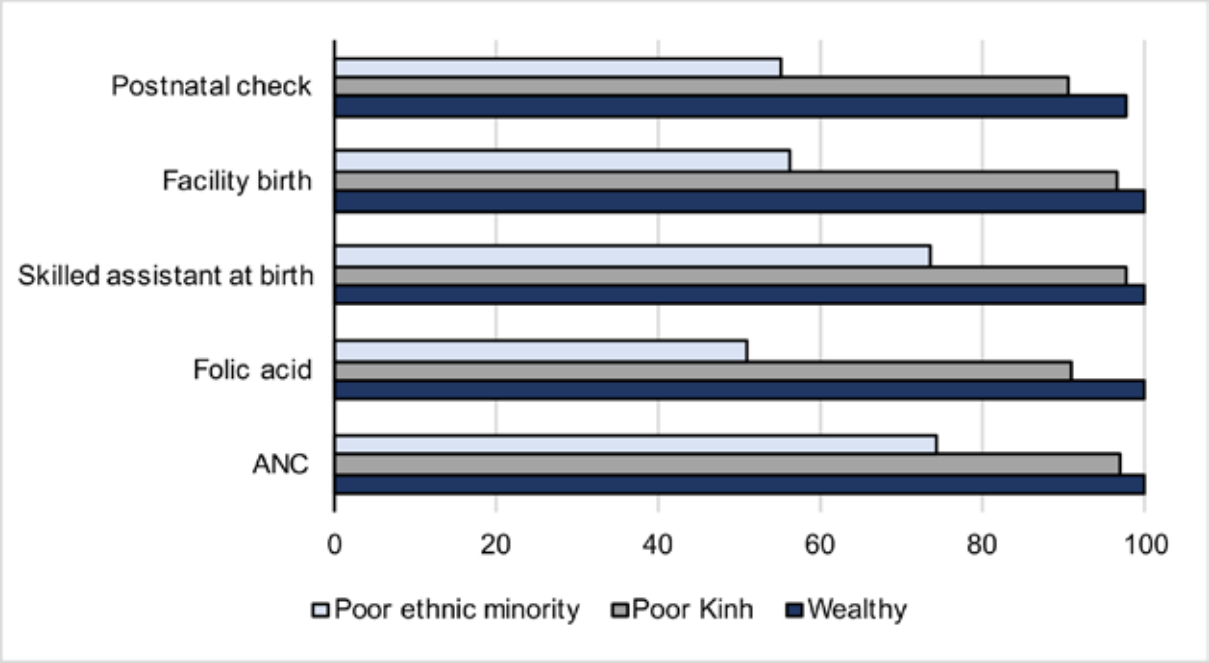



*Note: This figure was created based on an assessment of whether each of the 46 essential SRMNH interventions were covered by the health insurance package, the state subsidized health programs, or both or neither. The detailed items and how they were categorized can be found in Annex 4.*

*OOP=out-of-pocket..*

Disparities in access to midwifery services are suggested by economic disparities in access to antenatal care, assistance at delivery, and postpartum care. However, these relationships are confounded by ethnicity, geographic location, and education. Figure 51 disentangles ethnicity and poverty to show the economic and ethnic disparities. The figure shows that the gaps in access between poor Kinh women and wealthy Kinh women are not very great, but the disparities between poor ethnic minority and poor Kinh women are substantial, suggesting that financial barriers are not the key cause of disparities.

**Figure 51: Economic disparities in utilization of midwifery services in Viet Nam, 2014**




*Source: MICS 2014 [6].*

The literature review also indicated that while financial factors impede access to some midwifery services by some groups, they were not noted as the main barrier to access. In a government report to the UN on the MDGs in 2015, financial barriers were not identified as a major factor affecting access to contraceptives or antenatal care, while geographic and ethnic disparities were emphasized. [134]. However, the maternal mortality audit in 2012 did find that for a small share of deaths, high costs of services contributed to delays in seeking care in cases of OB emergencies [119]. While financial costs may not be a major factor affecting access, they may contribute importantly to the financial burden of health care costs and impoverishment for families, particularly in cases of complications or when unnecessary high tech services are provided.

### *3.3.5. Achieving the right balance of adequate access to care without over servicing*

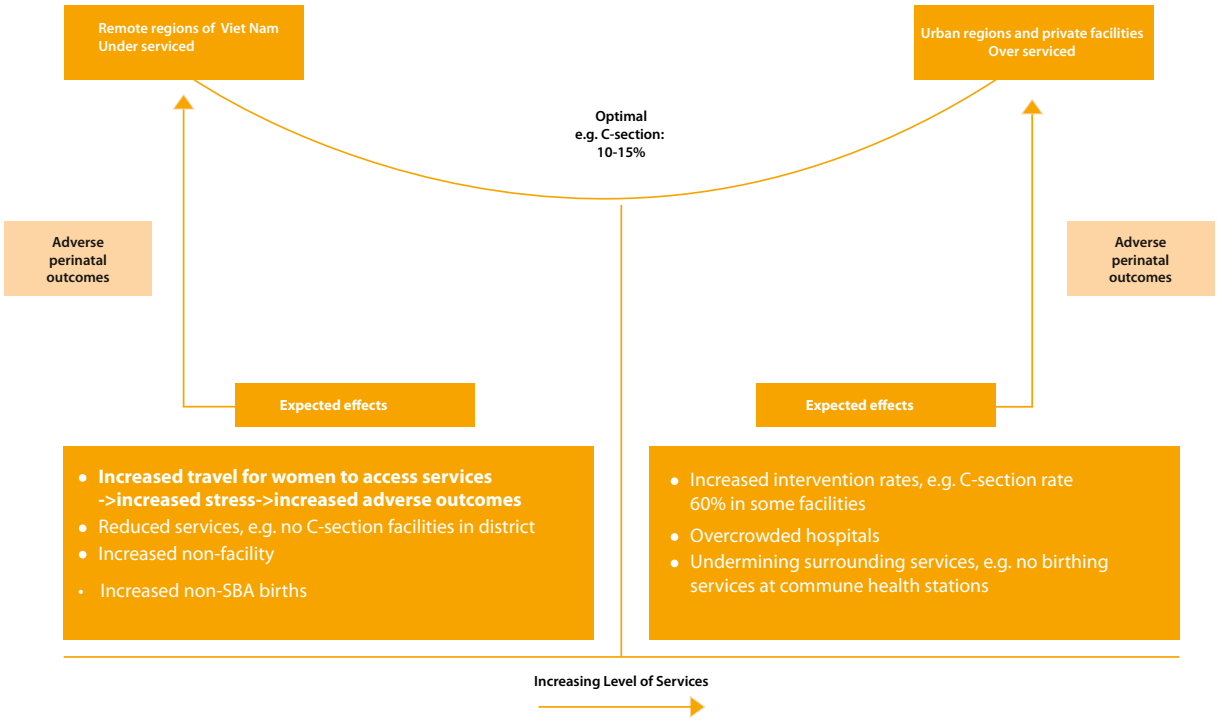
Achieving the right balance of adequate access to care without over servicing has become an issue of international concern over the past 15 years. As described recently in the Lancet systematic review of evidence-based clinical practice guidelines for routine antenatal, intrapartum, and postnatal care, there are two situations that exist in many countries: too little, too late, ***and too much, too soon*** [135].

*Too little, too late* describes cases of care with inadequate resources, care quality below evidence-based standards, or care that is withheld or is unavailable until it is too late to help. These situations are often associated with high maternal mortality and morbidity. In Viet Nam, commune health stations are perceived as providing too few services for antenatal care and birthing services, which contributes to more and more women seeking these services at hospitals or private clinics. However, experts in the country believe that commune health stations have the potential to be the best place for normal delivery due to their midwife-led maternity and newborn

care, low time pressure (as these facilities are generally not overcrowded), flexibility to allow family members to be present to comfort women during the labour and birth, and in many locations, short distance to an emergency OB facility if complications occur. However, non-use of commune health stations for birthing is likely to lead to deskilling of the workforce and reduction in quality of midwifery services over time.

*Too much, too soon* describes the routine over-medicalisation of normal pregnancy and birth which has been increasing in many countries over the last 20 years. *Too much, too soon* includes unnecessary use of non-evidence-based interventions, as well as use of interventions that can be lifesaving when used appropriately, but harmful when applied routinely or overused. *Too much, too soon* causes short- and longer-term harm to mothers and babies whilst misusing health system resources. *Too much, too soon* should be considered as one aspect of disrespect and abuse. In many countries, both *too much, too soon* and *too little, too late* coexist albeit often with a divide between urban- and remote-dwelling women or between different models of care (e.g. public versus private, or commune health stations versus hospitals). The Lancet article included the results of a systematic review of evidence-based clinical practice guidelines for routine antenatal, intrapartum, and postnatal care, categorising them as recommended, recommended only for clinical indications, and not recommended. As can be seen in Figure 52, a country will have expected effects from both under- and over-servicing that can be harmful to the population and can have significant resource and cost implications.

## Figure 52: Balancing between under-servicing and over-servicing in Viet Nam




*Adapted with permission from: Grzybowski, S. et al. Planning the optimal level of local maternity service for small rural communities: A systems study in British Columbia. Health Policy. 2009 92(2):p. 149-157.*

In Viet Nam, some OB interventions are frequently overutilized, which has the potential to increase adverse perinatal outcomes for mothers and babies. This report will focus on three of the most common interventions: (i) OB ultrasound; (ii) episiotomy; and (iii) C-section. Each intervention will be considered in terms of the incidence in Viet Nam (as compared to elsewhere) and the potential risks associated with overuse. Recommendations for practice will be discussed in Chapter 5.

### *Obstetric ultrasound*

#### Incidence

There has been a global trend towards increased use of OB ultrasound during normal pregnancies over the last two decades, often without obtaining the woman's informed consent [136]. In the United States, for example, a large study of low-risk singleton pregnancies reported the mean number of OB ultrasounds was 4.55 (median 4) [137]. In the United Kingdom (UK), the average number is 4.03 ultrasounds per low-risk pregnancy [138]. In developing countries the average number of ultrasounds may be lower. For example, in rural China 2.55 OB ultrasounds are performed on average per pregnancy [139]. In Viet Nam, ultrasound scans have become an integral part of pregnancy care and three-dimensional and four-dimensional scans are widely used [140]. Women in Viet Nam have an average of six ultrasounds in urban areas [141] and 3.5 in rural areas [142]. Overuse may be driven by women's requests and financial incentives for health care providers, which have resulted in ultrasounds being commonly performed without clinical indication [143].

International guidelines on the use of routine ultrasound during pregnancy differ. Guidelines in the UK recommend two routine ultrasound scans during a normal low-risk pregnancy: 1) a first trimester dating and Down's syndrome

screening, and 2) a second trimester screen for structural abnormalities [144]. Vietnamese guidelines recommend three routine ultrasounds (one per trimester), with the addition of a third trimester growth ultrasound [145].

**Risks**

There is a paucity of rigorously conducted studies to evaluate the potential for long-term adverse outcomes from in-utero exposure to OB ultrasound [146]. A 2005 review of its biological effects and safety concluded that it should only be performed for a medical indication and exposure should be kept as low as reasonably achievable because of the potential for foetal tissue heating [147]. Some studies have raised specific concerns about exposure to foetal ultrasound and low birth weight, delayed speech, dyslexia, and non-right-handedness [148].

***Low birth weight***. Foetal tissue heating and effects on insulin growth factor and heat shock proteins could provide the mechanism whereby OB ultrasound has been associated with a reduction in birth weight (in humans, monkeys, and mice) [146]. A retrospective case-controlled study in humans reported a doubling of the risk of low birth weight with exposure to four or more ultrasounds [149]. A randomised study reported a higher risk of small-for-gestational age neonates exposed to multiple scans (i.e. five, including Doppler flow studies) compared to controls, possibly due to the effect on bone growth [150]. Short-term follow-up with the sample from the aforementioned study found the difference in height and weight was no longer observable at one year of age [151]. Randomised studies [152–154] have shown no adverse effects from one or two pregnancy ultrasounds.

***Delayed speech.*** A retrospective case-controlled study reported that children evaluated to have delayed speech of "unknown cause" were more likely to have been exposed to a higher rate of OB ultrasound compared to controls with normal speech [155]. However, this study did not control for OB complications that may affect the likelihood of delayed speech and was not able to be replicated in a subsequent study with a much larger sample [156].

***Dyslexia.*** A small case-controlled study published an incidental finding of association between ultrasound exposure and dyslexia; however two randomised trials have subsequently found no such association [148].

***Non-right-handedness.*** Two randomised studies [157,158] reported an association between ultrasound exposure in utero and non-right-handedness in boys. While there may be a small increase in the incidence on non-right-handedness, there is not enough evidence to infer a direct effect on brain structure or function [148].

***Autism.*** There has been an increase in the diagnosis of autism spectrum disorders (ASDs) over the last two decades, which parallels the increase in the use of OB ultrasound [159]. However, there is no robust evidence that a cause-effect relationship exists [148].

**International practice norms**

The American College of Obstetricians and Gynaecologists recommends that OB ultrasound be used "prudently and only when use is expected to answer a relevant clinical question" [160] Some of the recommendations from the review of biological effects and safety [139] include:

1. Obstetric ultrasound should only be used when the potential medical benefit outweighs any theoretical or potential risk (II-2A).

2. Obstetric ultrasound should not be used for nonmedical reasons (e.g., sex determination or producing nonmedical images) (III-B).

3. Ultrasound exposure should be as low as reasonably achievable because of the

potential for tissue heating when the thermal index exceeds 1. Exposure can be reduced through the use of output control and (or) by reducing the amount of time the beam is focused on one place (dwell time) (II-1A).

4. All diagnostic ultrasound devices should comply with the output display standards (MI and TI) (III-B).

5. While imaging the foetus in the first trimester, Doppler and colour Doppler should be avoided (III-B).

6. Implementation of an ultrasound examination protocol increases efficiency and reduces the length of ultrasound exposure [161].

## *Episiotomy*

### Incidence

Asian women experience higher rates of perineal tearing [162], which has led to a presumption that anatomical differences in Asian women necessitate the routine use of episiotomy to prevent more serious perineal injuries [163,164]. One example of Too much, too soon in Viet Nam is the routine use of episiotomy in normal vaginal births. In a survey of 148 clinicians in Viet Nam, most obstetricians and midwives reported performing episiotomies in at least 90% of primiparous women [165]. Studies in other Asian nations have similarly reported high episiotomy rates [163,166,167]. Yet, Vietnamese-born women birthing in Australia are far less likely than those who birth in Viet Nam to experience an episiotomy, without adverse outcomes [168]. One study found that Chinese women's perineal lengths were no shorter than women of other races, nor was perineal length predictive of perineal tearing [166]. Such findings call into question the routine use of episiotomy in Viet Nam. Cultural factors, such as a belief that episiotomy helps preserve vaginal tightness after childbirth may also be relevant in Asian populations [164].

### Risks

A Cochrane review of randomised controlled trials (8-trials; n=5541) concluded that risks of routine episiotomy, including increased risk of severe perineal trauma, outweighed any benefits [169]. However, since the Cochrane review did not include any studies which focussed on ethnicity as a risk factor, clinicians questioned whether the results were generalizable to Vietnamese women [168].

### International practice norms

International guidelines, many of them longstanding, recommend only restricted use of episiotomy [135,170,171]. Studies conducted in China have found that a policy of restrictive use of episiotomy was effective in reducing the episiotomy rate, without compromising perineal safety [166]. A multi-sited study across four Southeast Asian nations examined the impact of a complex intervention to increase clinician's understanding and use the best available evidence related to episiotomies, and found significant improvements in clinical practice and women's health outcomes [172]. Practice change in some countries depends on cultural change, including training in how to protect the perineum in normal vaginal birth [165].

## *C-section*

### Incidence

As far back as 1985 the ideal C-section rate was considered to be between 10-15% [170]. Increasingly, this benchmark has been criticized as no longer being appropriate, though more recent work undertaken to try and ascertain the ideal C-section rate confirmed that when the C-section rate rises towards 10% across a population the number of maternal and newborn deaths decrease. Recent work by the WHO has confirmed the earlier rates, with the agency saying there is no evidence that mortality rates improve as the C-section rate rises above

10% [86]. In many countries there are significant differences in the C-section rates in urban and remote regions, and in some countries there is a significant variance between private and publicly funded services. Because different OB populations make it difficult to say that all hospitals should have a 10% C-section rate, a tool has been developed to calculate the optimum rate for a given facility (the C-Model) [173]. To facilitate within and between country comparisons, WHO has recommended the use of the Robson classification system [174] (Figure 53).

**Figure 53: Robson classification system**


*Source: WHO [175].*

### Risks

For most low-risk pregnancies, a C-section appears to pose greater risk of maternal morbidity and mortality than vaginal birth (Table 20).

## Table 20: Risk of adverse maternal and neonatal outcomes by mode of delivery

| Outcome | Risk | |
|---|---|---|
| Maternal | Vaginal Delivery | C-section |
| Maternal mortality | 3.6:100,000 | 13.3:100,000 |
| Amniotic fluid embolism | 3.3–7.7:100,000 | 15.8:100,000 |
| Third-degree or fourth-degree perineal laceration | 1.0–3.0% | Not Available (scheduled delivery) |
| Placental abnormalities | Increased with prior C-section versus vaginal delivery, and risk continues to increase with each subsequent C-section delivery. | |
| Urinary incontinence | No difference between C-section and vaginal delivery at 2-years. | |
| Postpartum depression | No difference between C-section and vaginal delivery. | |

| Neonatal | Vaginal Delivery | C-section |
|---|---|---|
| Laceration | Not Available | 1.0–2.0% |
| Respiratory morbidity | < 1.0% | 1.0–4.0% (without labour) |
| Shoulder dystocia | 1.0–2.0% | 0% |

*Source: Adapted from American College of Obstetricians [175].*

***Neonatal morbidity and mortality.*** C-sections are associated with an increased likelihood of admission to NICUs for babies [176], and an increased risk of neonatal mortality [177] and stillbirth in subsequent pregnancies [178].

***Chronic disease for adults who were born by C-section.*** The long term effects of C-section are also now becoming know with increased rates of diabetes [179] and asthma [180] in infants, and increased Body Mass Index, overweight, and obesity in adult offspring [181]. Some hypothesise that the relationship is causal with the gut microbiome differing between neonates born by C-section and those born vaginally leading to changes in normal metabolic function [182]. Non-exposure to labour also results in persistence of foetal gene expression with altered metabolism [183] and increased susceptibility to obesity and chronic conditions in adulthood, most likely through epigenetic mechanisms [184]. Preventing the first C-section is paramount [175].

***Repeat C-section and associated morbidities.*** Of women having an initial C-section in Viet Nam almost all will have a repeat C-section. Repeat C-section is associated with major OB complications [185], reduced fertility [186], and increased risk of ectopic pregnancy and spontaneous miscarriage [187].

***Cost.*** C-sections significantly increase the overall costs of childbirth and high rates of unnecessary C-sections can pull resources away from other services in overloaded and weak health systems.

### International practice norms

The American College of Obstetricians and

Gynaecologists has released a consensus statement for safely preventing the first C-section [175]. These guidelines include an overview of the risks and benefits of the different modes of delivery and are based on the evidenced-based reports developed by the U.S. National Institutes of Health. Additionally, a 2010 report on vaginal birth after C-section (VBAC) suggests that VBAC is a reasonable choice for women, with emerging evidence that serious harms can result from multiple C-sections [188]. The Robson scale is widely used to gather information on reasons for C-sections. For facilities with excessive C-section rates above what would be appropriate for their case mix, actions are generally taken for retraining and supervision of facilities. Pregnant women and their families are informed during pregnancy about what to expect during labour and delivery, including reasons why a C-section may be required, and what other alternatives are available, so they can make a birthing plan in advance.

## 3.4. Acceptability

While health services may be available and even accessible, the services may not be provided in a way that is respectful of the needs and preferences of the clients. This section covers the issue of respectful care for all women using midwifery services in Viet Nam. In the Vietnamese context, there are two groups considered to be in need of special attention, particularly in relation to acceptability of the care provided: unmarried adolescents and youth, and ethnic minority women. Thus, this section goes into some detail to explore the specific acceptability of care issues hindering access and utilization of care for these two groups who are at greater risk of receiving unacceptable and disrespectful care, which may lead them to being underserved. The section also presents some information on policy responses to try to increase acceptability of services, particularly youth-friendly services for adolescents and youth, and VBAs for ethnic minorities.

Some important achievements can be seen in the area of acceptability of care, including particularly high levels of service emphasis on newborn care, especially on early initiation of breastfeeding. There has also been a rapid increase in the number of youth-friendly facilities able to provide acceptable reproductive health services to this sensitive group. And finally, the legal framework has been put in place for sustainable development and maintenance of VBAs to serve ethnic minority reproductive health needs in a culturally acceptable and geographically accessible manner (Table 21).

**Table 21: Significant achievements since 2010 affecting the acceptability of services in Viet Nam**

| Achievement | Evidence | Data source |
|---|---|---|
| VBA network and policy strengthened | Competency-based curriculum, stipend paid by central budget, clear guidelines and scope of work | Policies, MOH, UNFPA reports |
| Increased availability of youth-friendly reproductive health services | Increased number of commune health stations and other reproductive health facilities with youth-friendly services | MCHD survey of facilities in 2010 and 2013 |

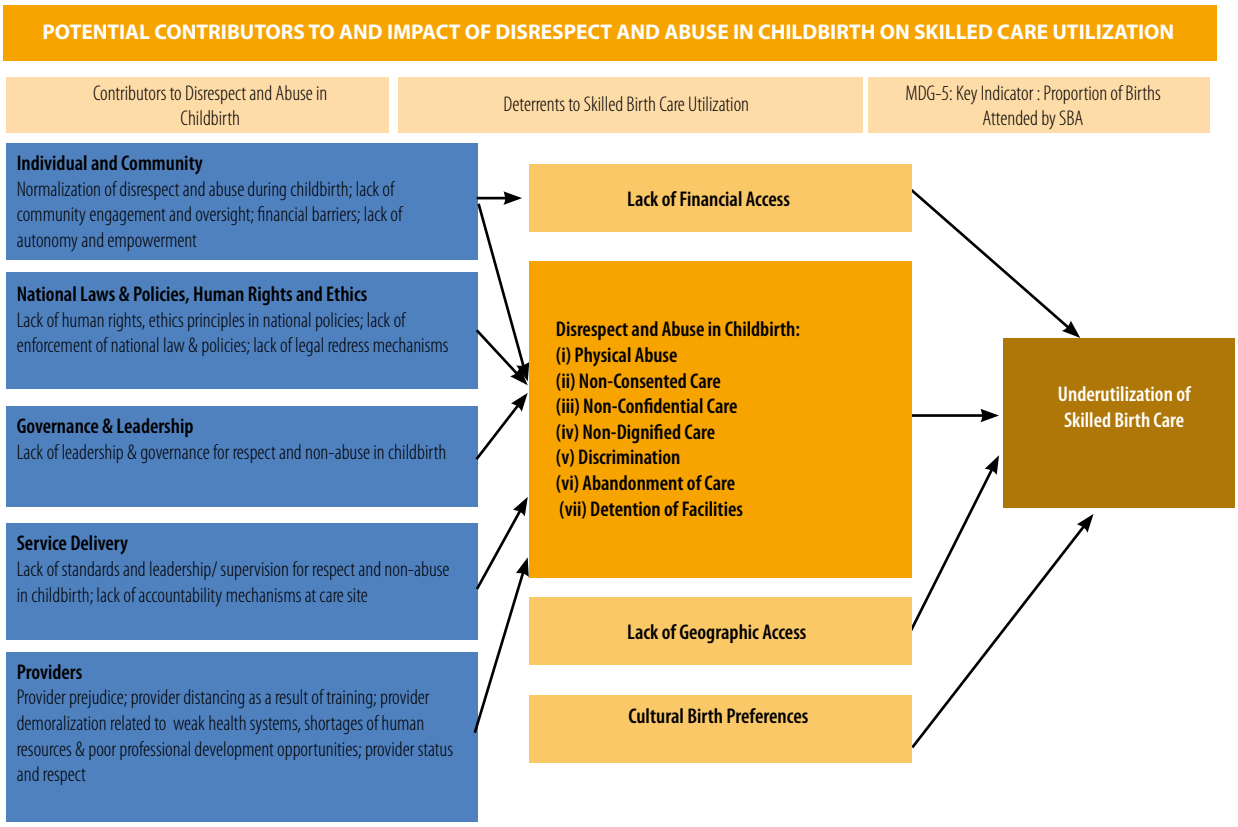
## 3.4.1. Respectful care for all

This section lays out the expectations for what is respectful care, then uses responses from the survey of training facilities and the outcome of a group discussion with NGOs working in reproductive health to identify aspects of care that can be considered to have achieved a high degree of respectfulness or which has been strongly emphasized in training. These aspects of care have led to increased potential that greater respectfulness will be achieved in the future as more newly trained health workers enter the workforce.

**Global attention on issues of respectful care**

There is global awareness that more needs to be done to ensure women receive respectful care as an important aspect of the quality of care experienced during childbirth [189]. The conversation on respectful care highlights the issue as a complex matter, consisting of social justice, human rights, social norms, health systems strengthening, and quality improvement. Although access to SBAs and facility-based childbirth is a key strategy in reducing maternal and infant mortality, the prevalence of disrespect and abuse in childbirth facilities has been repeatedly identified as a barrier to women using these services [190]. In 2014, the WHO released a statement calling for the prevention and elimination of disrespect and abuse during childbirth, stating *"Every woman has the right to the highest attainable standard of health, including the right to dignified, respectful care during pregnancy and childbirth* [191]." Calling for the mobilization of governments, programmers, researchers, advocates, and communities, this statement is a significant step forward in the promotion of health systems that support the rights of women and health care providers. It is based on an increasing body of work that has highlighted the evidence of disrespect and abuse that can occur during facility-based childbirth [192]. These behaviours have been categorized into seven types: physical abuse, non-consented care, non-confidential care, non-dignified care, discrimination, abandonment of care, and detention in facilities (Figure 54).

## Figure 54: Framework for assessing respectful care




*Source: Bowser [192].*

Although much of the research about disrespect and abuse in maternity care has been conducted in African settings [193], Bowser et al [192] define each of the above on the basis of reports of disrespect and abuse in facility-based childbirth across a range of settings in low-, middle-, and high-income countries. The seven types of disrespect and abuse are defined as follows [192]:

- Physical abuse includes behaviours like hitting or slapping the woman, as well as unnecessary routine use of episiotomies and post-partum perineal suturing without the use of anaesthesia.
- Non-consented care is treatment performed without the woman's permission, and without adequate information given to enable her to give meaningful consent. It also includes the use of coercion to compel women to accept treatment. Certain interventions, such as episiotomy, are particularly susceptible to being performed without the woman's consent or knowledge.
- Non-confidential care includes breaches of both physical and informational privacy. Breaches of physical privacy include women labouring and giving birth in view of others. Informational privacy includes inappropriate display or disclosure of sensitive client information such as HIV status, age, marital status, or medical history, and is particularly associated with discrimination that deters women from birthing in facilities.
- Non-dignified care includes behaviours intended to humiliate and includes shouting at, insulting, and treating women roughly. Importantly, the range of behaviours that may be perceived by women to be non-dignified are context-specific.

- Discrimination during childbirth may be based on a woman's race, ethnicity, age, language, other diagnoses (such as HIV/AIDS status or other STIs), traditional beliefs and preferences, economic status, or educational level.
- Abandonment of care includes women being left alone during labour and birth, and failure of clinicians to adequately monitor women and intervene in life-threatening situations. There are some accounts of women paying bribes in order to avoid abandonment of care or attract better quality of care [194].
- Detention in facilities relates to women not being permitted to leave a health facility with their baby, often until outstanding fees are paid.

**International orientation for improving respectful care**

To be successful, addressing the problems of *too much, too soon* and *too little, too late* must be coupled with efforts to establish and strengthen respectful maternity care as central to good quality care [135]. Importantly, Bowser et al (see Figure 55 above and [192]) identified contributors to disrespect and abuse in childbirth that operate at each level of health system provision: individual and community; national laws and policies that uphold human rights and ethics; governance and leadership; and service delivery and provider. Changes at each of these levels are therefore needed to promote respectful maternity care for all women, including ethnic minority and unmarried adolescents and youth. A consortium of leading international MCH organisations recently developed the Mother-Baby Friendly Birthing Facilities strategy [195], which provides a set of criteria, indicators, and enabling measures to improve quality of care and support respectful maternity care. The authors describe their approach as able to be implemented progressively, "imminently doable, low cost", and relevant in both low- and high-resource settings [195]. The Mother-Baby Friendly approach could strengthen and usefully guide further development of respectful maternity care in Viet Nam.

Although abundant evidence exists on improving the technical quality of care, attempts to measure, characterise, and improve the 'softer issues' of interpersonal relationships on which respectful ***maternity*** depends have been limited [196]. As a result, policy makers are only beginning to understand the importance of respectful maternity care [197]. Complex interventions involving training for clinicians and awareness raising in the community have been demonstrated to mitigate disrespect and abuse in maternity care [198], particularly in the context of participatory approaches [199]. Despite the relative paucity of evidence about maternity-specific approaches, lessons learned in other areas, such as HIV/AIDS treatment, may inform strategies to support respectful maternity care [193]. In that context, studies in Viet Nam [200] have demonstrated that participatory processes which involve health service staff in developing action plans to address stigma and discrimination have helped to improve attitudes towards HIV-positive patients. Similar approaches are likely to be needed to support respectful maternity care. Especially in the context of concerns expressed at a stakeholder meeting about the inclusion of service users' voices, consideration should be given to the usefulness of newly developed tools to measure women's perceptions of respectful maternity care (see [201]). Understanding how women perceive their care will be crucial to optimizing uptake of facility-based childbirth.

### *3.4.2 General situation of respectful care in Viet Nam*

As part of this study, a survey was administered to a small number (n=8) of key stakeholders (NGOs actively working in the area of midwifery) to investigate what emphasis they felt was currently being given (training, regulatory, standard setting, inspection, public education,

etc.) to achieving respectful maternity care in Viet Nam. This was followed by a group discussion, with a focus on understanding their views on respectful care as providers, advocates, and users of midwifery services. The results highlighted opportunities to strengthen the choices and control afforded to birthing women and also informed design of the survey for training institutions.

Choice of companion during labour and birth is an indicator of respectful maternity care and has been shown to improve maternal and infant health outcomes [202]. Respondents felt that change was needed to ensure women could have their choice of companion during birth, with one study showing that only 9.5% of women in Viet Nam had a choice of companion during birth [135]. Although respondents to the Viet Nam survey felt that women were routinely asked for their consent to interventions, the need for a greater focus on providing information to women about the risks and benefits of interventions was identified. Providing relevant and timely information and support to women enables them to maintain dignity and control [15], and is therefore fundamental to respectful maternity care. Survey respondents also said that greater emphasis was needed to encourage women to choose their own position for birth, including encouraging them to avoid lying flat on their backs.

The survey also identified areas where efforts to provide respectful maternity care have already seen positive change in Viet Nam. For example, respondents reported a growing emphasis on encouraging early breastfeeding within the first hour after birth, with some recognition of the importance of using an evidence-based approach to interventions such as induction or augmentation of labour, C-section, and episiotomy, and the importance of avoiding non-evidence-based interventions which have no benefit to women or babies (such as enemas, pubic shaving, and routine ultrasound scan after 24 weeks gestation). However, some of these practices remain prevalent (as discussed in the relevant sections on over-use), and further work is required to sustain and extend progress. The key points raised in the discussion that followed the survey were:

- Differences in quality of care exist across different parts of Viet Nam, with particular concern raised about issues of access to SBAs in remote areas.
- Differences are seen in public and private provision of care, with stakeholders keen to see MCH care provision as a human rights issue, not a commercial one.
- There is a need for greater involvement of service users, and systemic strategies to elicit their feedback.

In the VMR 2016 survey Form 3 respondents at medical schools providing junior college midwife training were asked to look at a list of client rights gathered from international research on respectful midwifery care and indicate, for each item, the degree to which they felt their training institution emphasized that item while training 3-year midwifery students. The results can be seen in the Table 22 below where a score of 1 indicates no or little emphasis and 5 indicates high emphasis.

## Table 22. Human right-based and reproductive right-based approach in training and respectful care in Viet Nam

| Respectful care | Average |
|---|---|
| Early breastfeeding (within the first hour after birth) | 5.0 |
| Contact of the newborn skin-to-skin with the mother immediately after the delivery for at least the first hour | 4.9 |
| Promoting breastfeeding on demand | 4.9 |
| The client's personal information should be kept confidential | 4.7 |
| Keeping mother and baby together 24 hours a day | 4.6 |
| Client should receive care throughout the stages of pregnancy, delivery, and postpartum period based on national guidelines for reproductive health care services | 4.5 |
| Provision of continuous support during labour | 4.5 |
| The client should enjoy privacy during care processes | 4.5 |
| Respectful care, including respect for benefits, traditions, and culture | 4.4 |
| Liberty of movement during labour | 4.4 |
| Skills for midwives to advise mothers and families about benefits and risks of interventions before, during and after birth | 4.3 |
| Choice of position for delivery, and encouragement to avoid lying flat on the back during labour | 3.1 |
| Client choice of companion during delivery | 2.9 |

*Source: VMR 2016 Survey*

It can been seen that there is a strong emphasis in these institutions on some of the areas that are thought to be important, such as early breastfeeding and skin-to-skin care. However, there is room for improvement in other areas such as enabling a woman to have her choice of companion during birth and choice of positions for birth.

Problems in ensuring respectful care have also been revealed in some research studies in Viet Nam. For example, studies on PMTCT in Viet Nam have identified some important inadequacies in health service delivery reflecting lack of provider sensitivity to the psycho-social aspects of care and inadequate follow-up care. One study found that women were generally happy to get HIV tests during antenatal care, but there was great dissatisfaction among the women who tested positive, due to the poor quality of counselling provided and failure of antenatal care providers to provide ARV treatments [62]. Another study in Hanoi found that HIV testing at time of delivery was routine in state hospitals, and that there were not well-defined opt-out procedures. Clients did seem to accept routine HIV tests, but it was found that the health workers at these hospitals were uncomfortable talking with the women about their HIV status. Instead, they relied on the official infectious disease reporting system to notify the women of their HIV status, which basically constituted non-consensual sharing of information about the woman's HIV status with another government facility [203].

Some promising experiments are being tried to improve quality of reproductive health care, including the respectfulness of health workers at commune health stations [204]. Results of a rigorous impact evaluation found that the extra training and branding of the social franchise model had significant impact on client assessment of satisfaction in relation to provider attitudes. The MOH is currently placing substantial emphasis on reforming the service style and attitudes of health workers towards ensuring satisfaction of patients. A new code of conduct for government health workers in general was issued in 2014 (Circular 7/2014/TT-BYT). It is a good time for moving forward in this area in relation to midwifery services. While the Law on Examination and Treatment 2009 provides for some protections of patient rights in Article 3, there is not yet a clear patient bill of rights, like in Thailand, that informs them more clearly of their rights while seeking healthcare services.

**Population acceptance of modern models of midwife-led reproductive health care**

In present-day Viet Nam, most Vietnamese women are giving birth in hospitals, and accepting often unnecessary interventions in their birthing experience because they don't know that they could have a choice of a more natural, normal childbirth. No information is currently available to understand women's preferences for their birthing experience, but it is likely that in Viet Nam, as in many other societies, women would be more accepting of a normal, natural childbirth than an overly medicalized experience, as long as the birth attendants were highly trained and skilled, and the birthing facility was near enough to a facility where emergency OB services could be obtained if necessary. This is an area in urgent need of further research and inquiry in the Vietnamese context.

### *3.4.2. Respectful reproductive health care for unmarried adolescents and youth*

Sexuality among youth and adolescents in Viet Nam is influenced by both traditional mores and globalizing and modernizing influences [45,205], as are policy responses and provider attitudes related to adolescent reproductive health care [206]. Surveys indicate that youth are sexually active and in need of sexual and reproductive health services, particularly information to help them protect themselves from pregnancy and disease, but also contraception delivery and sexually transmitted disease screening and treatment [207]. Between 2003 and 2009, the percentage of Vietnamese youth (15-24 years) who reported having premarital sex increased from 7.6% to 9.5%, while the mean age at first sex among youth aged 14-25 fell from 19.6 to 18.1 [208,209]. By 2015, age at first initiation of sex for young people aged 10 to 24 was 18.7 [210]. In 2009, the proportion of single youth who have ever had sex remained low in the group aged 14-17, but had increased to 14.8% of men and 2.1% of women in the group aged 18 to 21, and to 29.8% of men and 6.1% of women aged 22 to

25. Sex among single youth is more prevalent in urban than rural areas. Attitudes of young people indicate a substantial acceptance of premarital sex [209]. However, the stigmatization of sexual relations outside of marriage, particularly for young women, reinforces abstinence, while these same values decrease adolescents' abilities to obtain accurate information about sexuality and HIV/STIs, and engage in safer sex [207]. In a 2016 survey on sexual and reproductive health among adolescents and young adults in Viet Nam, about 50.5% of women aged 15-24 reported currently using modern contraceptives, primarily male condom (21.5%), oral contraception (17%), and IUD (12%). However, the proportion reporting discontinuing use was as high as 40.5%. About 30% of women aged 15-24 are estimated to have unmet need for modern contraception, with unmet need higher among Kinh and never-married women [210]. The survey found that cost and availability were no longer major constraints to use of condoms (only 3.0% and 0.8% of females and males, respectively, listed this as a constraint); instead the greatest barriers to purchasing condoms among young females was feeling shy (77%) and fear of being seen to be doing something socially unacceptable (21%) [210].

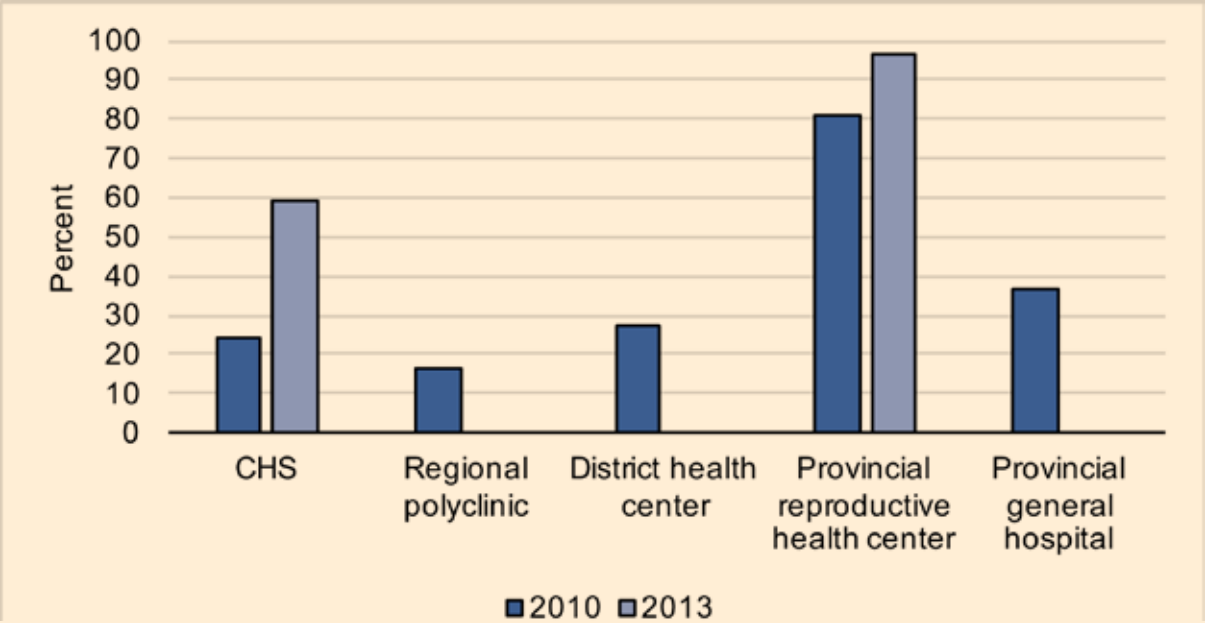
There is high-level awareness of the need to ensure appropriate reproductive health services to youth. The National Strategy for Reproductive Health for the period 2001-2010 (136/2000/QĐ-TTg) included, as one of its specific objectives, entitled "Improvement in the reproductive and sexual health of adolescents" through education, counselling, and provision of reproductive health services appropriate for their age group, and intended to intensify activities to meet their reproductive healthcare needs in the period 2001-2005. The Vietnamese Strategy for Population and Reproductive Health for the period 2011-2020 (Prime Ministerial Decision 2013/QĐ-TTg issued in 2011) sets out the specific objective of improving reproductive health of adolescents and youth (aged from 16 to 30), with targets set for establishment of adolescent and youth-friendly reproductive health services within reproductive health care facilities and reducing adolescent unwanted pregnancy. Within the strategy, plans are to create a project for improving reproductive health of adolescents and youth.

Implementation of policies in Viet Nam to deal with unmet reproductive health needs of adolescents and youth gave not yet achieved high coverage or effectiveness. While the general school system does teach some basics about human reproduction, the resulting practical sexual health knowledge of high school students is inadequate. A study of 11th grade students in Hanoi found that 62.1% of students had learned about sex and reproduction in school, but only 15.3% of 11th graders knew which was the most effective contraceptive method, 46.9% knew the proper timing to put on a condom, and 41.2% knew the proper action to take if a condom breaks [211]. It is also unlikely that the school program introduces needed life skills for negotiating consensual sexual relations or safe sex. Discomfort about sexuality in unmarried women was associated with greater passiveness in decisions about using condoms and contraception [212]. When asked about adolescent sexuality, contraception, and abortion, midwives in training revealed a general disapproval of adolescent pre-marital sexual relations and abortion, which is likely to affect their attitude when serving clients. These midwives in training did, however, express concerns about gender-based imbalances in sexual relationships, limited knowledge about reproductive health issues among youth, and negative societal attitudes [45], which they understand have strong effects on youth and adolescent sexual behaviour and reproductive health needs.

By 2013, youth-friendly health services were available in 62 out of 64 provincial reproductive health centres, and 59.4% of commune health stations had youth-friendly reproductive health services in the form of a separate corner for advising youth [5] (Figure 55). However, it is not clear to what extent service providers passively

wait for youth to seek services or actively reach out to ensure that youth are aware of these services and use them. Population workers focus their efforts mainly on married couples who have already had their first child, while schools, factories, and other places where large numbers of young people are concentrated do not generally have active youth-friendly reproductive health activities to ensure adequate knowledge and to make condoms and other contraceptive methods readily available to this group.

**Figure 55: Availability of youth-friendly services in Viet Nam by different facility types, 2010 & 2013**




*CHS=commune health station*

*Note: The 2013 survey only asked about youth-friendly services in commune health stations and provincial reproductive health centres.*

*Source: MCHD surveys 2010 [20] and 2013 [5].*

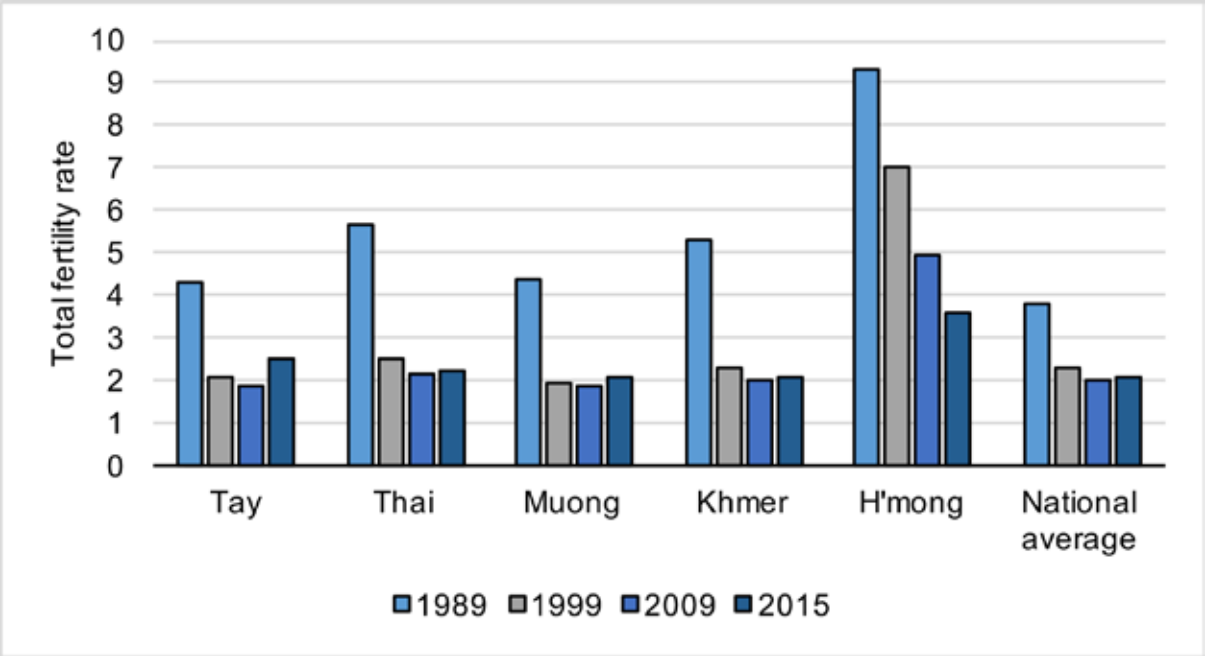
Unwanted pregnancy in unmarried youth is likely to be a serious problem as a result of inadequate counselling on contraception, while stigma about premarital pregnancy may lead to delays in seeking abortion early. Current regular demographic surveys avoid asking unmarried women sensitive questions about contraceptive use, pregnancy, or abortion, so the current magnitude of the problem is unknown. MCHD statistics indicate only 5,548 abortions among adolescents, out of 266,857 total abortions, though some studies indicate the number is likely to be substantially higher [206]. It is not known how many unmarried youth (aged 18 to 30) are undergoing abortions due to unwanted pregnancy. Unwanted pregnancies and abortion among adolescents and youth in Viet Nam are attributed to a lack of balanced reproductive health information and services for adolescents, as well as negative social attitudes towards adolescent sexuality [206]. In interviews, providers said counselling of unmarried clients should focus on warning against the risks and dangers of abortion and pre-marital sexual relations, of which the providers themselves disapproved [206]. Because of various barriers, unmarried young women tend to access abortion services late in pregnancy, may seek clandestine (and unsafe) abortion care, or give birth and then abandon the newborn babies [45,70,205]. Unsafe abortion may put these young women at risk of future infertility.

STIs, including HIV, are an important threat to the reproductive and sexual health of youth and adolescents if policymaker and provider attitudes prevents youth and adolescents from getting adequate knowledge about the risks and of methods to protect themselves, including empowerment of women to be able to demand safe sex in sexual relationships. Related to this is a concern about the HIV epidemic spreading through bridging behaviours between high risk and low risk individuals not practicing safe sex consistently. A recent study found half of Vietnamese youth aged 18-29 years were sexually active, with 43.3% reporting premarital sex. Multiple sex partners were reported by 31%, with a higher rate among males (56.7%) than females (9.2%). Almost 27% of males and 5% of females engaged in sexual bridging behaviours, i.e. having sex with high-risk groups like commercial sex workers or injecting drug users and with a partner in a low-risk group. While condom use was high among commercial sex workers, it was low among non-regular partners, spouses, and regular partners [213].

### *3.4.3. Cultural sensitivity is key to ethnic minority sexual and reproductive health*

Ethnic minority women have a particularly high need for reproductive health services due to several factors. Adolescent childbearing tends to be more prevalent in ethnic minority areas (Figure 40 above), leading to higher risks to mother and child [214] in health contexts least able to deal with complications. Malaria is endemic in many mountainous regions where ethnic minority people are concentrated. ***Malaria*** infection ***during pregnancy*** contributes to maternal anaemia, and can lead to miscarriage, premature delivery, low birth weight, congenital infection, and/or perinatal death [215]. Higher fertility is another factor influencing the greater need for reproductive health services among some ethnic minority groups. The 2009 Census estimates indicate substantially higher fertility among the H'mong population than the other large ethnic groups studied (Figure 56). The infant and under-five mortality rates are also substantially higher among ethnic minority groups than among the Kinh majority. In 2009, the infant mortality rate among the Kinh was 13/1000 live births, while among the Thai it reached 27/1000 live births, and among the H'mong it was more than three times higher, at 46/1000 live births [216]. In addition, many ethnic minority women, due to poverty, suffer from malnutrition and extremely heavy workloads starting early in life, which create additional risks to them during their reproductive years [217].

**Figure 56: Trends in total fertility rate by ethnic group in Viet Nam, 1989~2015**




*Note: Figures for 2015 may not be comparable as the survey was implemented only in ethnic minority regions, not nationally, so increases seen between 2009 and 2015 for some groups may be due to lack of comparability due to different sample representation.*

*Source: 1989-2009: UNFPA. Ethnic Groups in Viet Nam 2011-2015.[216], Survey on the Socio-economic situation of 53 ethnic minority groups in 2015 [218].*

Ethnic minority women are much less likely than Kinh women to use reproductive health services. The section above on accessibility to reproductive health services revealed that ethnic minority women have greater unmet need for contraception (despite their higher modern contraceptive prevalence rate) than Kinh majority women. The share of pregnant ethnic minority women using antenatal care (Figure 42) and institutional births or births assisted by a trained birth attendant (Figure 45) are substantially lower than the nearly universal utilization rates among the Kinh majority.

Physical accessibility of maternal health services can be an important barrier to use of antenatal care and facility birthing services. Ethnic minority women tend to live in mountainous regions, where villages are scattered and the distance to the nearest commune health station may require half a day of travel, a substantial barrier to seeking antenatal care or birthing services, especially if there is low perception of the benefits of these services, or cultural barriers that lead to resistance to use of such services. The rough terrain is also perceived as putting women at risk of miscarriage [217] or is simply a barrier to a facility-based birth as it is too difficult to travel in the last trimester [219]. Distance has been associated with higher neonatal mortality [220].

Affordability of maternal health services may also hinder ethnic minority women from using services. Financial barriers to seeking reproductive health services have been reduced with the government policy of subsidizing health insurance coverage for ethnic minority people living in remote areas, and an additional backup policy that provides a subsidy of two million VND to ethnic minority women living in poor households in disadvantaged localities who are not covered by health insurance to support them when they give birth at health facilities, as long as they comply with government population

policy (Decree 39/2015/ND-CP).[29] However, indirect care costs may lead to a heavy financial burden, particularly if the woman is transferred to a hospital for care, as tradition often requires that the woman is accompanied by multiple family members [217]. Research indicates that even when incentives were given to women to give birth in a health facility, including covering food costs, many ethnic minority women still preferred to deliver at home for cultural reasons [32].

Cultural and social acceptability of maternal health services relates to ethnic minority women's view that pregnancy and childbirth are healthy and normal processes not requiring interventions by health professionals unless there are complications [32]. They believe that antenatal care, particularly ultrasounds, can determine whether a birth will be easy or not, and this contributes to the choice of home birth. Nulliparous women were more likely to have a facility birth, but multiparous women, especially those with an uneventful first birth, were likely to give birth at home, where they would not be separated from their children and family [32]. Some research has also found that some ethnic minority groups may perform complex rituals surrounding births that are more easily performed at home [219], or consider it essential to have a traditional healer to perform sacred rituals and have many close family members present during labour, which was not permitted by the health facilities [32]. Preferences for non-supine position during labour (e.g. squatting or kneeling), herbal bath following delivery, ritual burial of the placenta, and a concern that health facilities would not accommodate these preferences were other reasons given for wanting a home birth [32]. Many ethnic minority women have never received any health education to know what benefits they could receive from antenatal care or skilled birth attendance. Research found a lack of awareness of the signs of labour or complications, which could lead to delays in seeking treatment for complications during pregnancy and labour [32].

Appropriateness in the technical quality of maternal healthcare services may also hinder its use by ethnic minority women. The MCH assessment of reproductive health service capacity in 2010 found that in the regions with a high share of ethnic minority population, namely the Northern Midlands and Mountains region and the Central Highlands, an unacceptably high share (65%) of commune health stations were unable to provide five essential maternal health care services [20].[30] Another study in 2009 found a substantial lack of competencies among doctors and midwives currently attending births at commune health stations, as they failed to correctly perform all required steps of life-saving procedures such as active management of the third stage of labour, manual removal of placenta, or neonatal resuscitation [21]. Language barriers can also affect use of services, since many health workers do not speak ethnic minority languages. Negative health care worker attitudes, such as being impersonal or rude, were found to undermine the acceptability of care from the perspective of ethnic minority clients [217]. Some ethnic minority women indicated reluctance to be examined by male health workers [221], while others were not inhibited from using services for this reason [32,219].

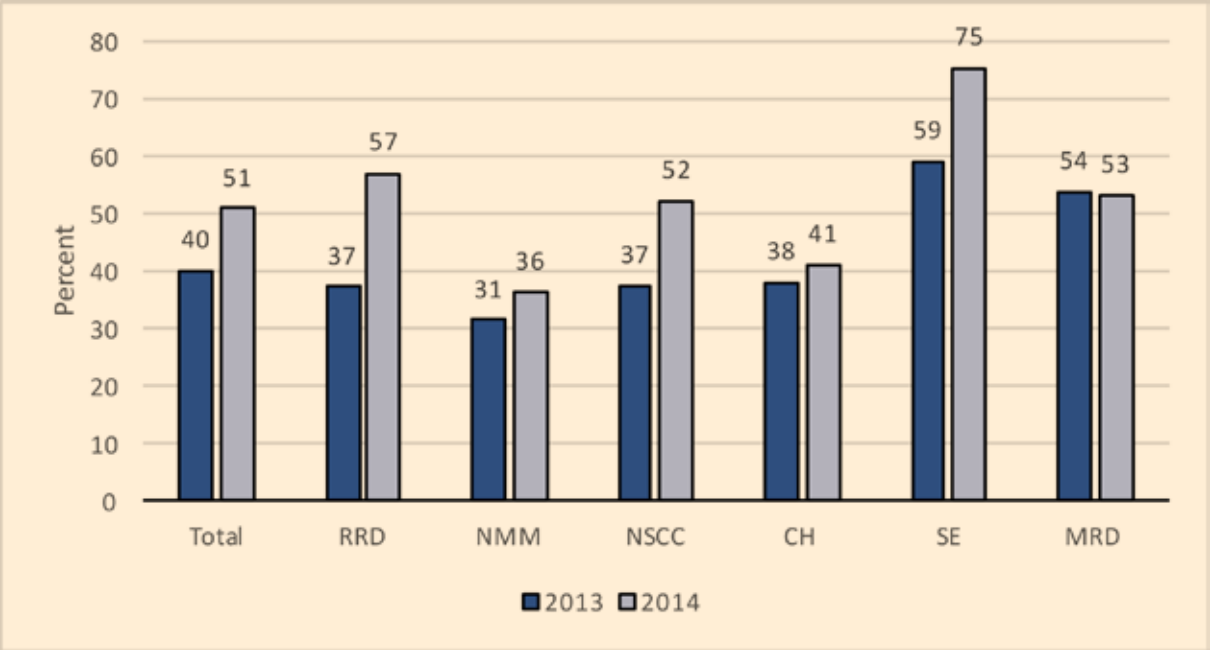
Efforts to reduce disparities in utilization of reproductive health and other health services include investments in commune health stations to meet basic standards for medical evaluation, treatment, and prevention benchmarks [222]. So far, results of improvement efforts in standards of commune health stations indicate rapid improvements in lowland areas, except the Mekong River Delta, though much slower improvements in the two regions with large ethnic minority populations, namely the Northern Midlands and Mountains and the Central Highlands (Figure 57). Recent efforts at

29 *The current policy covers women who give birth to a first or second child. If the birth is to a third child, the entitlement is still valid as long as one of a long list of criteria are met, for example, that it was a first birth and triplets were born.*

30 *Normal cephalic delivery, active management of third stage of labor, fundal massage, manual removal of the placenta, and administration of anti-convulsants.*

providing continuing medical education focused on SBA skills and early essential neonatal care are likely to have increased the share of commune health stations capable of providing essential services, but no follow-up survey was available to know the extent of such improvements.

**Figure 57: Proportion of communes in Viet Nam meeting national commune benchmarks, 2013-2014**




*Source: Health Statistics Yearbook 2013, 2014 [12].*

Strengthening of the VBA network is the main initiative to respond to the need for a more appropriate cultural perspective that leads to increased access and acceptability of reproductive health services for ethnic minority women living in remote and disadvantaged regions. VBA strengthening has been done through ensuring competency-based training to achieve SBA, guidelines for VBA tasks, local budget funding for stipends, clear definition of the areas where VBAs should work (which defines where central budget funds will be used), and clear scope of responsibilities. The relevant policies are shown in Table 23.

## Table 23: Policies strengthening village birth attendants (VBAs) in Viet Nam

| Year | Policy focus | Name of policy | Remark |
|---|---|---|---|
| 2009 | Remuneration | Decision 75/2009/QD-TTg regulates allowance for village health workers (VHWs) | Number of VHW: Each village in remote and disadvantage areas can recruit 1-2 VHWs.<br><br>Allowance: equal to 0.5 of government's basic salary scale for VHWs at remote and disadvantage areas, paid from central budget. |
| 2012 | Training | Decision No. 2847/QĐ-BYT approved basic Training programme on midwifery for VBAs | Competency-based training to meet SBA standards. |
| 2013 | Training | Decision No. 2531/QĐ-BYT: approved advance training programme on midwifery for VBAs | Competency-based training to meet SBA standards, with focus on advanced midwifery skills to provide first aid in cases of complications. |
| 2013 | Scope of work and remuneration | Circular 07/2013/TT-BYT: MOH regulates functions and responsibilities of VHWs | VBA is a type of VHW, specialized on MCH; working in remote areas where villages are far from commune health stations and utilization of antenatal care and assisted birth is low.<br><br>Allowance for VBAs: Same as for VHW according to Decision 75 above. |
| 2013 | Training | Official correspondence No. 2930/BYT-BMTE. Instructed training for VBAs | Request the strong collaboration of local authorities to implement Gov't/MOH policies to recruit ethnic minority midwives to work at village level (first time). |
| 2014 | Training and remuneration | Official correspondence No. 4331/BYT-BMTE: Strengthened training and utilization and implementation of allowance for VBAs | Request the strong collaboration of local authorities to implement Gov't/MOH policies to recruit ethnic minority midwives to work at village level (second time). |
| 2014 | Equipment | Decision No. 2737/QD-BYT: approved the medical bag including instruments and supplies for VBAs | Provided essential tools for VBAs to perform their work. |
| 2013 | Equipment | Decision No. 3245/QĐ-BYT issuing the list of components in the clean delivery package | Provides essential items for clean delivery. |
| 2015 | Professional guidelines | Decision No. 5702/QD-BYT: Approved the National Guideline for provision of MCH by VBAs | Allow VBA services to be provided for community and technical procedures of each service. |

The MOH, in issuing MOH Circular 07/2013/TT-BYT, stipulated the functions and responsibilities of VHWs. This circular stipulates that VBAs should be included as a type of VHW (entitled to stipends) specialised in MCH, to be deployed to work in areas with low utilization of institutional delivery and antenatal care services and remote, isolated areas with difficult access to the commune health station. Decision 75/2009/QD-TTg has not yet been updated to include the entitlement as a stipend for VBAs, and this has hindered implementation and sustainability of the VBA policy. In 2015, the MOH approved a national guideline for the provision of MCH by VBAs [Decision No. 5702/QD-BYT]. VBAs will continue to be trained at an elementary level to serve remote and ethnic minority areas with low uptake of antenatal care and institutional delivery services, but will not be given the title of midwife according to Circular 26.

As described in Section 3.2, VBAs provide a crucial outreach function for midwifery care in remote areas. The main advantage of VBAs is that they live in the community with their clients, so access is easy. The other advantage is that they come from the same culture, and are likely to be effective at introducing more evidence-based birthing practices into their communities, such as sterile instruments for cutting the cord, while taking advantage of the practices that are already advantageous to women giving birth, such as squatting during birth and immediate and exclusive breastfeeding. An evaluation of an early project supporting training of VBAs and raising women's awareness of reproductive health issues showed substantial benefits from this approach [223].

While the VBA strengthening strategy is useful, it is still oriented towards convincing ethnic minority women to use commune health stations or district hospital services for antenatal care and birthing services, since home births in remote areas make it extremely difficult to access emergency care when something goes wrong. It is considered essential that the commune health station and district health staff in these regions improve their cultural sensitivity. Currently, the medical education system does not train health staff to be sensitive and open to the health-related cultural practices of different ethnic groups, especially practices related to pregnancy and childbirth. Training materials on medical anthropology [224] have been produced for use in medical universities, colleges, and secondary schools, however, they have not yet been adequately incorporated into the curriculum.

## 3.5. Quality

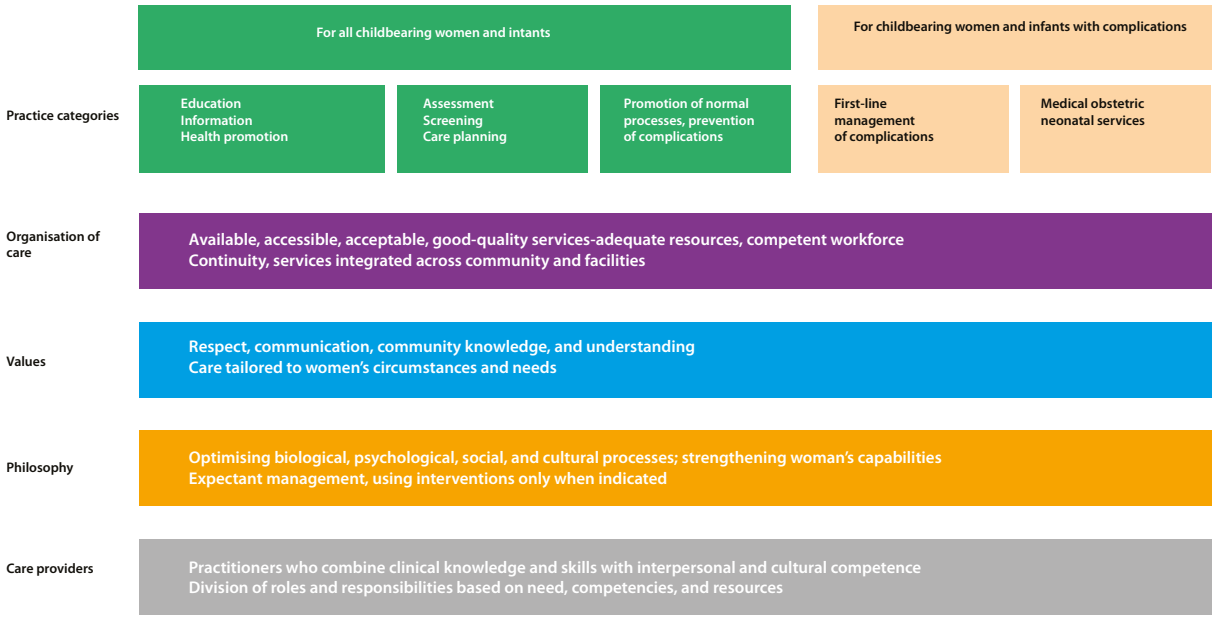
The Midwifery 2030 Pathway to Health is supported by an evidence base on midwifery presented recently in a leading medical journal – the Lancet [225]. The Lancet series highlighted the strong evidence base and widespread consensus among public health professionals that midwifery care has an essential contribution to make to high-quality maternal and newborn health services. Although it is recognised that many health professionals can provide midwifery care, experience from a range of countries has also shown that the introduction of educated, trained, motivated, and respected registered midwives are **the most appropriate care provider for most midwifery services.** When midwives are integrated and supported in a health system that facilitates effective teamwork, enables consultation and referral, and has sufficient resources for them to conduct their work, their introduction has been associated with a rapid and sustained decrease in maternal and newborn mortality, and with an improvement in quality of care.

One of the most effective ways to gain the most benefit from midwifery care is to reorganise the way midwives work to enable them to provide increased levels of continuity to women. A Cochrane systematic review of 15 randomised controlled trials (n=17,674) found outcomes for women and babies are significantly improved when continuity of care from a known midwife across the maternity episode is provided [19]. This is often delivered within a Midwifery Group Practice model where small groups of three to

four midwives work together to provide caseload (one-to-one/know your midwife) care to women. Benefits include significantly fewer interventions in birth (less epidural or other analgesia, amniotomy, episiotomy, and instrumental births), and fewer women experiencing a preterm birth, or foetal or neonatal death. Women receiving continuity of midwifery care also experience more spontaneous vaginal births and reported higher satisfaction scores and sustained breastfeeding rates. Continuity of carer from a known midwife is thought to exert its effect through the trusting relationship that is built between the woman and her midwife. This is known as relational continuity and it facilitates early engagement in services, increasing the opportunity for recognising and treating maternal and infant complications.

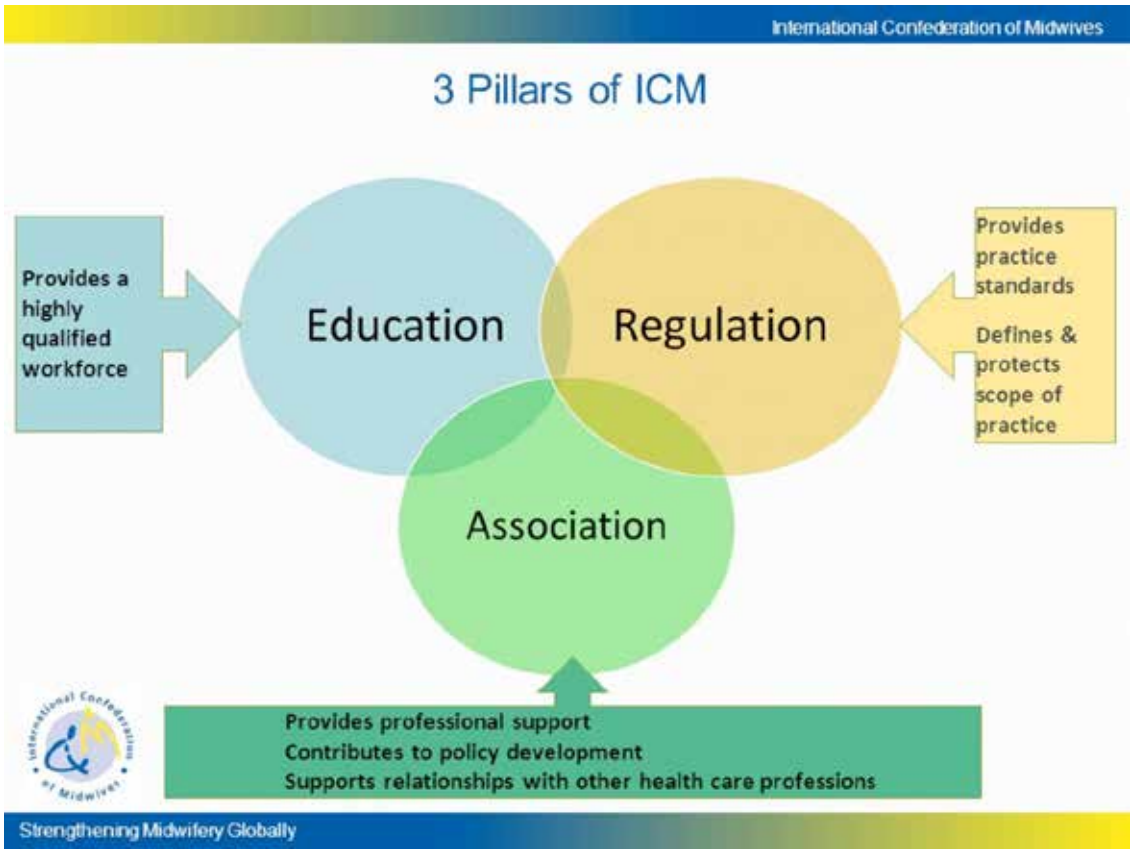
Analysis of 461 systematic reviews showed overwhelming evidence of the positive impact of midwifery with 56 short-term, medium-term, and long-term outcomes that could be improved by care within the scope of midwifery: reduced maternal and neonatal mortality and morbidity, reduced stillbirth and preterm birth, decreased number of unnecessary interventions, and improved psychosocial and public health outcomes [15]. A range of recommendations have been categorised as effective or ineffective practices and these fall into a framework for the provision of quality care [15]. The quality framework was developed to guide midwifery strengthening that focuses more on ensuring women can obtain a comprehensive set of midwifery services from a team of skilled and complementary providers rather than the traditional fragmented care focused on identification and treatment of pathology in a medical setting (Figure 58). Effective coverage requires not only making services available, but facilitating women's use, ensuring responsiveness of services to women's needs and expectations, and improving quality of care (i.e. appropriate and effective interventions).

## Figure 58: The Lancet framework for quality maternal and newborn care



To improve the quality of midwifery services the ICM recommends strengthening the three pillars of the midwifery profession (Figure 59). These include: education to provide a highly competent, qualified workforce; organisation of the members in a strong association to advocate on behalf of and strengthen the profession; and regulation of the activities of the professionals (standards, scope of practice). This report examines these three areas as part of the assessment of midwifery in Viet Nam. In particular, this next section provides information on midwifery education and the curriculum reform that has been undertaken, followed by information on the VAM. Regulation is covered in Section 3.6 Legal Framework.

**Figure 59. International Confederation of Midwives (ICM) three pillars of midwifery**




There have been significant advances in these areas since 2010 (see details in Table 24).

**Table 24: Significant achievements since 2010 affecting the quality of midwifery services**

| Achievement | Evidence | Data source |
|---|---|---|
| New ICM-standard midwifery curricula for 3-year and 4-year midwives | 3- and 4-year midwifery curricula officially endorsed by MOH; 3-year curriculum issued by MOET along with supporting policies | Review of regulations; information from MOH |
| Share of midwifes in government workforce with less than 3-year midwife training is starting to decline | A shift in the share of midwives with higher levels of education is starting to be seen | Data from MOH on trends in workforce over time by level of qualification |
| Increased efforts to improve the practical experience for students | Increased time in the clinical area and increased simulation equipment | Fieldwork and interviews |
| Rapid growth in number of clinical guidelines issued | A large number of new standards and guidelines have been issued or updated in the past decade | Review of regulations |
| Strengthening of professional association | Midwife now heading the association; NGO and international agency support to VAM | Key informant interviews |
| Strong emphasis of training establishments on interventions for the newborn, particularly breastfeeding and skin-to-skin contact | High share of training facilities indicated emphasis on this; NGO key informants also pointed out these strengths | Training facility survey responses, observations in hospital settings |

### *3.5.1. Pre-service midwife training*

Viet Nam is in the process of strengthening midwives in the midwifery workforce through upgrading from a 2-year to a 3-year training program with a competency-based curriculum. Table 25 provides a summary of key SoWMy indicators on midwife education for Viet Nam. Among the 56 countries reporting information on midwife training in the SoWMy 2014, Viet Nam is among the 47 countries requiring 12+ years of education prior to starting midwifery training. Viet Nam now belongs to the group of 35 (of 56) countries requiring 3-years of midwifery training to qualify, with only 11 countries requiring less than 3-years and another 10 countries requiring 4-5-years. Like Viet Nam, some 42of 52 countries report the latest revision of their curriculum occurring in the years since 2009. Viet Nam's curriculum requires only 20 continuity of care experiences, implying 20 supervised births, while internationally 32 out of 52 countries require a minimum of more than 20 supervised births. Viet Nam so far has only graduated 1,988 3-year midwives since it introduced the 3-year training curriculum, accounting for only 5.7% of total midwives. The VMR 2016 survey inquired about job placement of midwives after graduation, but few schools could report on this indicator, and those that did indicated a small share of these higher-qualified midwives found work in SRMNH within a year.

**Table 25: Current status of SoWMy indicators on midwifery education for Viet Nam**

| Midwifery Education | |
|---|---|
| Minimum high school requirement to start training | Grade 12+ |
| Years of study required to qualify (rounded) | 2 (2016-2024); 3 (2024+) |
| Standardized curriculum, Year of last update | Yes, 2003 (2-year); 2010 (3-year) and 2015 (4-year) |
| Minimum number of supervised births in the curriculum | 20 |
| Number of 3-year graduates from 2010 to 2016 as % of all practicing midwives | 1,988 of 35,055 (5.7%) |
| % of 3-year graduates employed in maternal and neonatal health within one year | 20% (reported, but most unknown) |

***Historical development of midwife training in Viet Nam***

In Viet Nam, midwifery training and the occupational title have been evolving over time largely in response to policy pressures. Before 1997, elementary midwives were given one year of training and secondary midwives were given three years of training (two years of which were focused entirely on midwifery) in medical training establishments under the MOH. Starting in 1998, the Law on Education was passed which shifted responsibility for medical training from the MOH to the Ministry of Education, and reduced the duration of secondary training programs to just two years after completion of high school. During the period 1998-2005, there was a strong emphasis on filling gaps in broad primary care health human resources at the commune health station, so midwife training was replaced by training of ***OB-paediatric assistant doctors*** requiring completion of a 2-year assistant doctor training program with an additional six month training specialized in obstetrics and paediatrics *(y sĩ sản nhi)*. This policy provided the health system with a large contingent of midwives who also had a substantial community and public health training, and were authorized to prescribe medicines. It was an appropriate solution at the time to meet the urgent human resource needs of commune health stations. As of 2005, this training was discontinued and replaced by 2-year secondary midwife training. In this period, the elementary midwife program seems to have disappeared, due to lack of employment demand for elementary midwife graduates that translated into rapid declines in the number of students applying to the program, and a decrease in options for upgrading for elementary- to secondary-level positions.

In Viet Nam, the term midwife is often used synonymously with OB nurse, nurse-midwife, OB-paediatric assistant doctor, and midwife. Nevertheless, the training emphasis in the different programs varies, with some focusing more on general nursing skills and others on community and public health skills, while midwives receive training that is more focused on the core midwife skills. The different names reflect the many changes in policy and training over the years. Circular 26 describes the scope of work for various levels of midwife, including Level IV midwife with secondary or junior college training, Level III midwife with university-level training, Level II and Level I midwife with master's and PhD level training, which are not yet

available in Viet Nam. There is some concern that nurses specialized in OB/GYN, nurse-midwives, and OB-paediatric assistant doctors are not explicitly mentioned in Circular 26 as having the same scope of work as a midwife, and that this will affect their professional registration, work opportunities, and options for upgrade education. Current policy aims to upskill the midwife workforce and to ensure uniformity in skills and competencies at a junior college or higher level. VBAs will continue to be trained at an elementary level to serve remote and ethnic minority areas with low uptake of antenatal care and institutional delivery services. Elementary midwives have been phased out of midwife responsibilities according to Joint Circular 26, which also phases out the title of midwife for those with only secondary training by 2025.

**Table 26: Summary of training and occupational positions for midwives in Viet Nam**

| Midwifery education | Latest curriculum endorsed | Occupational titles |
|---|---|---|
| < 2 years certificate | 2012 | Elementary midwife* (phased out), VBA |
| 2-year Diploma | 2003 | Level IV midwife, OB-paediatric assistant doctor |
| 3-year Diploma | 2010 | Level IV midwife, junior college nurse specialized in obstetrics and gynaecology |
| 4-year bachelor degree | 2014 | Level III midwife, nurse specialized in obstetrics and gynaecology, nurse-midwife[31] |
| Master's degree | No program | Level II midwife |
| PhD | No program | Level I midwife |

**No new hires starting 2021, and phased out by 2025.*

While midwifery has long been recognized in the health sector as an occupation separate from nursing, it was only in 2010 that the national education system under the MOET formalized this by creating a midwife 4th level code separate from the nurse code for junior college level (14/2010/TT-BGDĐT). One year later in 2011 the secondary midwife code was created (34/2011/TT-BGDDT). The first direct entry, university-level midwife training program, with an initial cohort of 19 students, is being implemented at the Nam Dinh Nursing University and started in October 2016. The MOH is working with the MOET to have a separate 4th level university midwife code to distinguish it from the code for nursing. However, this work is pending as the ASTT awaits the MOET to issue the new codes. [32] In the meantime, Nam Dinh Nursing University is temporarily using the code for university-level nursing for its direct-entry university midwife program. University level midwifery training is crucial for developing the junior college midwifery instructor workforce.

### Midwifery workforce extends beyond midwives

Midwives are only one of the types of health workers providing midwifery services. They are supported by other health workers including

31 *The HCMC Medical and Pharmaceutical University calls their program the nurse-midwife program, while other universities call their program the nurse specialized in obstetrics program; only Nam Dinh Nursing University has the direct entry university midwife program begun in 2016.*

32 *While the 4-year midwife training curriculum and training textook were developed in 2014 and 2016, respectively, they have not yet been officially approved and the university midwife training code has not yet been issued by the MOET. ASTT sent an official letter (No. 10145, dated 24 December 2015) to the MOET providing comments for revising the national educational code system and requesting adding university midwife into the system. As of the end December 2016, the policy had still not been revised. This has had adverse effects on recruitment of students into university midwifery program in the 2016-17 school year.*

those with higher level specialized qualifications and those with complementary skills like nurses, VBAs, and population workers who work as a team with midwives. This section briefly explains the training of these health workers.

General practitioners and general assistant doctors are part of the primary care team providing midwifery services, mainly at the regional polyclinic and commune health station levels. Obstetricians and paediatricians are important specialized providers in the maternity area, particularly for women and newborns with complex needs or complicated cases referred to hospitals for care. General practitioners obtain their initial training in 6-year programs at medical universities. General practitioners can become specialists through additional years of training and supervised practice in three levels, including specialist orientation, first-level specialist, or second-level specialist.

Nurses play an important role in midwifery service provision, assisting in OB surgery, in paediatric care, and supporting the work of midwives in the commune health stations. General nurses obtain secondary-, junior college-, or university-level nursing degrees in Vietnamese medical training establishments. Nursing with a specialization in obstetrics and gynaecology or nurse midwife (in the HCMC Medical and Pharmaceutical University) are alternative forms of specialized midwifery training at the university level in Viet Nam and in some junior colleges as well (e.g., Thanh Hoa Medical College).

VBAs provide basic essential midwife services and referrals in remote villages under supervision of, and in collaboration with, the commune health stations. Their training is focused on developing basic competencies through six, 12, or 18 month programs, as described in sections 3.2 and 3.4 above.

Population workers can obtain training in a secondary-level program developed to standardize the qualifications of population-health staff (GOPFP-DOP Decision 480/TCDS-TCCB in 2011). The content of this program is focused on IEC and behaviour change communication related to population, reproductive health, and family planning, and the training is organized through medical secondary schools. It is unclear how many people have received such training.

**Midwife training curriculum reform**

Framework curricula for midwifery training exists for all levels of qualification including VBAs (2847/QD-BYT in 2012 and 2531/QD-BYT in 2013), secondary midwives (23/2003/TT-BYT), junior college midwives (11/2010/TT-BGDDT), and university midwives (developed and endorsed by the MOH in official correspondence 9513/BYT-K2DT dated 27/12/2015). The 3-year and 4-year midwifery training programs meet Viet Nam's midwifery competency requirements approved by the MOH in Decision 342/QD-BYT in 2014. Each medical school creates their own training materials and training program based on this curriculum framework, so there is some variation across schools in the content and teaching methods.

The current secondary midwifery curriculum in Viet Nam was developed with support from UNFPA and approved for use starting in 2003. However, the curriculum for secondary midwifery was not designed as a competency-based curriculum, and the duration of study is measured in periods (50 minutes) of study, rather than credits, according to new MOET regulations. This curriculum is likely to be phased out as public sector demand for secondary midwives will end starting in 2021 (see Circular 26).

The new junior college (3-year) midwifery curriculum and the university-level (4-year) curriculum were developed in a continuing partnership between Australia (University of Sydney) and Viet Nam, with support from UNFPA and additional international technical assistance from UK and Italian experts[33] . Efforts have been made to ensure that the 3-year and 4-year curricula meet ICM standards. In contrast to the secondary midwife curriculum, the junior college and university-level curricula have greater emphasis on specific skills/competencies and

33 *A two year midwifery training was developed by the MOH during 2002-2006 with technical assistance from UK and Italian experts*

clinical practice, are more client-focused, women-centred and respond to an appropriate cultural perspective, and the duration of study is measured in credits. In addition, regulations on conditions for midwife training were also created to ensure basic infrastructure, equipment, instructors and clinical practice conditions are in place for quality midwifery training that meets international standards of ICM (659/QD-BYT in 2015). An assessment of conformance of Viet Nam's 3-year midwife curriculum with the 2013 ICM standards is presented in Table 27. It shows that many of the criteria are met in terms of current regulations, although compliance with those regulations is incomplete, and in some cases the regulations are not specific to midwives but general for all medical professions.

**Table 27: Conformance of Viet Nam's 3-year curriculum with the International Confederation of Midwives (ICM) standard**

| Criteria | International Standard (ICM 2013) | Vietnam's status |
|---|---|---|
| Organization and administration | The host institution helps to ensure that financial and public/policy support for the midwifery education programme. | MOH has created public policies to support midwifery education. For all medical training, public subsidies for training combined with tuition payments may be inadequate to meet training costs. |
| Midwifery faculty | Predominantly midwives who work with experts from other disciplines as needed. | Low share of instructors are midwives, because of the shortage of midwives with university and higher degrees. Instructors are mainly doctors. |
| Clinical preceptors | Has formal preparation for clinical teaching or undertakes such preparation. | Requirement in MOH Decision 659 to have MOH medical pedagogy certificate or 10+ years of midwife practice, but many instructors do not meet this requirement. |
| Student-teacher ratio | The ratio of students to teachers is determined by the midwifery programme and the requirements of regulatory authorities. | MOH Decision 659 sets student to teacher ratio requirements for medical schools. |
| Entry criteria | Entry requirements including minimum requirement of completion of secondary education | Minimum 12 years formal schooling |
| Requirements for practice to acquire competencies | Sufficient midwifery practical experience in a variety of settings to attain the current ICM Essential competencies for basic midwifery practice. | Students have supervised practical experience in hospital and primary care settings and schools require minimum number of hands-on practice experience for different competencies |
| Curriculum | Meets the criteria of the ICM definition of a midwife and regulatory body standards leading to registration as a midwife | Yes, although additional 1 year supervised practice is required before being registered |
| Length of programme | Direct entry: Minimum length is three (3) years<br><br>Post-nursing: Minimum length is eghteen (18) months | Direct entry: 3 years<br><br>Post nursing: 18 months |
| Ratio of theory to practice | Min 40% Theory<br><br>Min 50% Practice | 47% theory, 53% practice in medical-related courses |
| Curriculum model | Evidence-based approaches to teaching and learning that promote adult learning and competency-based education. | Competency-based, and evidence-based thanks to technical support from Sydney University in developing the textbook. |
| Midwifery ethics | Midwife graduates are knowledgeable, autonomous practitioners who adhere to the ICM International Code of Ethics for Midwives. | Vietnam does not yet have a code of ethics for midwives, but there is a general medical code of ethics. |

*Note: Black indicates achieved and Blue indicates not yet fully achieved.*

*Sources: ICM Global Standards for Midwifery Education (2010) Amended 2013. Circular 11/2010/TT-BGDĐT (2010) issuing the Junior college midwifery curriculum. 659/QĐ-BYT (2015) on professional conditions for ensuring university and junior college midwifery training in Viet Nam.*

The requirements for non-midwifery courses in the curriculum (politics, defence education, physical education, foreign language, computer science, and legal education) take up a substantial share of the overall midwifery training time, and experts from the University of Sydney have expressed some concern that this adversely affects the ability to ensure that students receive training in all competencies and competencies are adequately practiced in the remaining 2.5-years of medical and midwifery content (normally three years are required for transferring midwifery knowledge and competencies).

While Viet Nam does have relatively new evidence-based curricula for midwife training, there are, nevertheless, substantial delays in updating the curriculum to reflect changes in the reproductive health guidelines. The secondary curriculum has not been updated since 2003, and the junior college midwife training was developed in 2010 after the 2009 reproductive guidelines came out, but in 2016 new guidelines were not issued, creating a need for curriculum framework revision. The system does not seem to have in place a mechanism for continuous revisions to curriculum content to reflect new reproductive health guidelines or new developments in international recommendations for midwife practice from WHO or ICM.

**Midwife instructors**

Theory instructors at junior college midwifery training establishments must have qualifications of university degree or higher, while clinical guides must have professional registration (Law on Vocational Education No. 24/2014/QH13). University instructors must have a master's degree or higher, although exceptions can be made for specific sectors (Law on University Education No. 08/2012/QH13). In the initial period of running the midwife training programs, due to the lack of highly trained midwives, the Ministry of Education and Training has permitted obstetricians and university-level nurses specialized in obstetrics and gynaecology to work as midwife instructors instead of midwives.

Through the VMR 2016 Survey (Form 3), an assessment was made of the qualifications of the current midwifery training faculty in schools providing 3-year midwife training. The form asked whether faculty were currently registered to practice, in what field, and what their work experience was. The results reveal that most midwifery instructors in the junior college training program do have the required university-level qualifications, with only 1.7% of all instructors found to still have only a junior college-level training (in nursing) (Table 28). In all, 11 of the 17 responding schools indicated that they had at least one instructor with a university degree in the field of midwife or nurse-midwife.

**Table 28. Structure of highest qualification of permanent instructors in Viet Nam**

| Highest qualification of permanent instructor | No. | % |
|---|---|---|
| 1. MS/MA/PhD | 76 | 43.2% |
| 2. Specialty I or II | 37 | 21.0% |
| 3. MD | 13 | 7.4% |
| 4. Other university degree | 47 | 26.7% |
| 5. Junior college | 3 | 1.7% |
| 6. Other degree | 0 | 0.0% |
| Total | 176 | 100.0% |

*Note: Responses from 17 schools.*
*Source: VMR 2016 Survey*

For pedagogical and research work, midwife instructors are required to have more than a degree. The VMR 2016 survey included some additional questions to get at these issues (Table 29). MOH Decision 659/QD-BYT (2015) imposes the requirement that midwife instructors have a medical pedagogy certificate from the MOH. The survey results indicate that less than one quarter of instructors meet this requirement, and two of the 17 responding schools had no instructors with these certificates.

To boost the effectiveness of the new junior college curriculum, Sydney University provided a training of trainers course in 2010 for selected lecturers from colleges where the 3-year training program was being initiated. Only about 15% of instructors reported that they had benefitted from that program, spread across 14 of the 17 responding schools. As it is important for instructors to constantly update their knowledge with the advancements in the field of midwifery in order to update their training materials, it was somewhat disturbing that only one-quarter of instructors indicated they could read professional materials in English, and a little over one-third indicated they had access to the internet. Thus other mechanisms, possible a country-wide, need to be relied on to ensure that the latest evidence can be available to instructors and embedded into practice.

**Table 29. Supplementary indicators reflecting qualifications of midwifery instructors in Viet Nam, 2016**

| Number of core midwifery instructors have: | No. | % |
|---|---|---|
| A medical pedagogy certificate from the MOH | 125 | 23.3% |
| Attended Training of trainer course conducted by University Sydney | 78 | 14.6% |
| Can read professional materials in English | 137 | 25.6% |
| Have access to the internet | 196 | 36.6% |
| Registered to practice | 142 | 89.3% |

*Note: Responses from 17 schools reporting on 536 instructors.*

*Source: VMR 2016 Survey.*

The survey results indicate that among permanent instructors for junior college programs, 89% (142 of 159) were currently registered to practice in the field of their highest education qualification. The largest group of instructors were obstetricians (36%), followed by nurses (13%), and paediatricians (12%). Midwives accounted for only 9%, and nurse-midwives accounted for another 6% of the permanent instructors providing junior college training to future midwives (Table 30). It is important that university-level midwife training be strengthened rapidly to expand capacity for midwife training, and to ensure that midwives are getting the appropriate midwife philosophy and skills that are best taught by other midwives. Nevertheless, it is likely that for the next 10 years midwife training will still rely heavily on non-midwives to provide midwife training, particularly upgrade training.

**Table 30. Field of practice for the highest qualification of permanent instructors**

| Field of practice in the highest qualification of permanent instructor | No. | % |
|---|---|---|
| 1. Obstetrician | 63 | 36.0% |
| 2. Paediatrician | 21 | 12.0% |
| 3. General practitioner | 8 | 4.6% |
| 4. Midwife | 16 | 9.1% |
| 5. Nurse-midwife | 10 | 5.7% |
| 6. Nursing | 23 | 13.1% |
| 7. Other | 34 | 19.4% |
| **Total** | **175** | **100.0%** |

*Source: VMR 2016 Survey.*

**Junior college midwife core coursework**

On average, for each of the 13 core midwifery subjects there are five permanent instructors, with some schools having as few as one instructor teaching the subject and some as many as 12 (Table 31). The ratio of students to teacher ranges from 14 to 26 depending on the course, which seems reasonable. However, this ranged from 1 to 100 students per instructor when comparing schools. This range seems implausible, and may be due to school misreporting, although it is not unusual for theory courses in many countries to have more than 100 students with one instructor and multiple teaching assistants. During simulation labs, participants noted that the student-to-teacher ratio is substantially lower, at 5-10 students per instructor.

The number of hours of instruction varies substantially across schools in Viet Nam. In some schools the number of theory hours is 15, while in others as much as 60 for the same course. The number of simulation and clinical practice hours were reported incompletely. Results in Table 31 show that clinical practice hours seem to exceed simulation practice hours, although some schools seemed to report hours for only one of these categories, suggesting that schools may not fully distinguish between these two types of practice and their different purposes for statistical purposes. In general, clinical practice hours seem to be substantially greater than theory and simulation practice. If the upgrade training from secondary to junior college midwife increases substantially during the next 10 years, substantial pressure will be placed on instructors, and class sizes may increase. Excess teaching loads make it difficult for instructors to continuously upgrade their own knowledge and pedagogical skills, especially as most midwife instructors are also registered practitioners, active also in providing services to clients. These indicators should be monitored over the next 10 years to ensure quality of instruction.

## Table 31. Indicators about core midwifery subjects in Viet Nam, 2016

| Midwifery Subjects | No. of permanent instructors | Student-teacher ratio | No. of theory hours | No. of simulation practice hours | No. of clinical practice hours |
|---|---|---|---|---|---|
| Midwifery anatomy and physiology | 5 | 17 | 26 | 45 | 5 |
| Gynaecology (women's care) and andrology | 5 | 14 | 23 | 20 | 56 |
| Pregnancy care | 5 | 15 | 24 | 23 | 80 |
| Care during normal delivery | 6 | 14 | 29 | 26 | 92 |
| Postpartum care | 5 | 15 | 21 | 7 | 68 |
| Care during labour and for difficult deliveries | 5 | 15 | 28 | 27 | 87 |
| Neonatal care | 5 | 16 | 20 | 9 | 63 |
| Care of children under age 5 (paediatrics) | 5 | 16 | 20 | 8 | 56 |
| Advanced midwifery care | 5 | 16 | 31 | 6 | 62 |
| Community reproductive health care | 5 | 21 | 19 | 1 | 72 |
| Midwifery management | 4 | 26 | 22 | 20 | 20 |
| Population and family planning | 5 | 21 | 18 | 25 | 49 |
| Research Practice | 4 | 24 | 19 | 30 | 15 |
| **Mean** | 5 | 18 | 23 | 19 | 56 |

*Note: Responses were received from 17 schools, but some schools did not record answers for questions on hours for all courses.*
*Source: VMR 2016 Survey.*

### Midwifery textbook and training materials

The MOH's midwifery textbook developed in collaboration with Sydney University is being used by only 11 out of 17 junior colleges and universities providing junior college midwife training that responded to the survey. This is surprising as it is a comprehensive, up-to-date textbook that is tightly linked to the framework curriculum and provides internet links for updating information or viewing videos on how to implement procedures. Some of the schools that indicated they do not use the textbook did send their staff to the training of trainers course run by the University of Sydney on these materials, so they have had exposure to it.

The schools indicating that they are not using this textbook reported a long list of different training materials. This included training materials developed by the schools themselves, training materials from the MOH, including some specifically from the ASTT, the national reproductive health guidelines from

2009 and the 2015 draft updated version, and other materials authored by Vietnamese or international authors. Many of the materials reported are somewhat outdated (more than 10 years old) or undated, despite the fact that medical knowledge is expanding at a rapid pace and thus materials can be out of date within a short period. While it is normal that each school prepares its own training materials, the fact that only 37% of instructors reported having access to the internet for professional activities and only about 25% are able to read in English suggests that there is a need for a national agency or university with access to the latest international evidence to help all schools obtain the most up-to-date evidence on midwifery care for regular updating of training materials.

### Clinical training facilities

An important part of midwifery training is the clinical practice that students are exposed to. We found that the average number of clinical practice facilities each institution worked with was six, with some schools having only one facility and some with as many as 14. Most students were conducting their clinical practice in a provincial hospital (71%), with a further 13% gaining experience in district hospitals, 10% in the central hospital, and 6% in some other type of facility. None indicated using private hospitals as practice facilities. A total of 94% of schools agreed that there was a contract between their training establishment and the practice facility that assigned specific responsibilities to each party. The average number of beds at the clinical training facilities was 321 (maximum 1,260), with an average of 698 births each month. The average number of students the facilities accepted for clinical practice at any one time was 57 (with a range of 12-400). An average of 10 clinical guides (i.e. mentors) work with the students (with a range of 1-30), giving an average student to clinical guide ratio of 5:1. A total of 92% of the guides had junior college or higher education and 5+ years of clinical experience (Table 32).

**Table 32. Educational qualifications and clinical experience of clinical guides in Viet Nam, 2016**

| Qualifications and experience | No. | % |
|---|---|---|
| Junior college or higher education and 5+ years of clinical experience | 276 | 92.0% |
| Junior college or higher but less than 5 years clinical experience | 26 | 8.7% |
| Less than junior college but 5+ years of experience | 23 | 7.7% |
| Less than junior college and less than 5 years of experience | 4 | 1.3% |

*Source: VMR 2016 Survey.*

Most respondents (representing 16 out of 17 responding schools) indicated that their students had a clinical training book. The number of simulation and clinical assessments required by each institution is presented in Table 33. It can be seen that for most assessment items the students were conducting the required number of simulations and clinical practice assessments, apart from neonatal resuscitation. However, the number required varied substantially across schools (Figure 60), with many schools having very low requirements, which brings into question whether these requirements are adequate for achieving clinical competency.

## Table 33. Assessment requirements per student at establishments providing 3-year midwifery training in Viet Nam, 2016

| Average number of assessment requirements per student | Simulations required | Simulations acquired | No. required clinically | No. acquired clinically | Share of schools achieving or exceeding clinical quotas |
|---|---|---|---|---|---|
| Prenatal assessment and palpation | 6.0 | 5.6 | 13.6 | 16.6 | 13/14 |
| Care in labour including monitoring of foetal and maternal wellbeing | 5.9 | 5.6 | 19.5 | 19.8 | 12/14 |
| Essential care for mother and newborn during and immediately after birth | 6.1 | 6.8 | 14.4 | 14.7 | 11/14 |
| Neonatal resuscitation | 3.8 | 3.6 | 6.6 | 5.5 | 10/14 |
| Immediate postpartum care including advising and supporting breastfeeding | 6.4 | 6.3 | 17.4 | 18.1 | 13/14 |
| Postnatal care of well mother and baby including breastfeeding support | 6.4 | 6.1 | 17.4 | 19.6 | 13/14 |
| Postnatal follow-up and contraceptive advice | 6.1 | 6.1 | 13.2 | 15.6 | 12/14 |

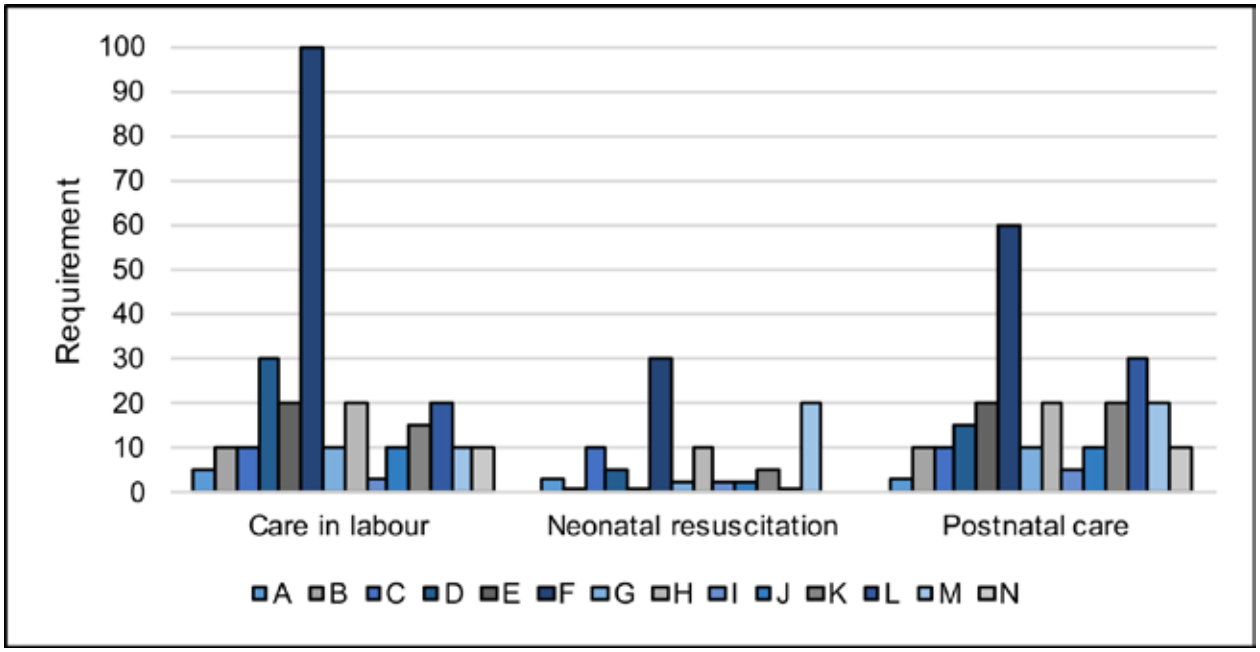
*Note: Results based on responses from 14 training institutions providing junior college midwifery training.*

*Source: VMR 2016 Survey.*

One area where it is difficult to get adequate clinical practice during training is dealing with OB emergencies, because these are rare events. However, it is essential that midwife trainees and practicing midwives continuously and routinely drill the standard procedures for responding to such emergencies in a simulation format so they will be prepared to respond if such events occur. This may also be why neonatal resuscitation practice experience falls short compared to quotas, since it is generally a rare event.

It was noted by several stakeholders that there is a need for increased investments in simulation labs because it is becoming increasingly difficult to find practice opportunities in clinical settings. In the VMR 2016 survey, open questions asked about the challenges associated with clinical experience and responses were given by half of the schools, highlighting problems, including: *women do not consent to students practicing on them; too few normal births due to rising C-section births; equipment inadequacy; shortage of teaching staff and clinical guides; lack of funds to pay clinical guides; and clinical guides in hospitals have too much work so the amount of time to provide clinical guidance and supervision of students is not enough.*

**Figure 60: Clinical practice requirement variation across establishments providing 3-year midwifery training in Viet Nam, 2016**




*Notes: A to N are the code of surveyed establishments*

*Source: VMR 2016 Survey.*

A total of 76% of respondents replied that students are required to conduct continuity of care experiences. Continuity of care experiences give midwife students the chance to provide care from onset of pregnancy through the postpartum period, which would support the Midwifery 2030 model of midwifery-led care.

**Suggestions from schools for improving quality of midwifery training**

When asked about the challenges facing midwifery education in the training facility respondents' replies included the following: *training materials are not yet very diverse; specialized equipment to serve training currently only meets a minimum level; students do not have the opportunity for much clinical practice on patients; required changes in the training curriculum and organization of training towards competency-based training; the market economy has affected choice of occupation of students and employment opportunities for graduates; there are an increasing number of training establishments; the population's knowledge is improving, and practice directly on patients and mothers is becoming more difficult; overload of students from many other training facilities; and graduates face difficulties, it is hard to find a job.*

When asked about recommendations they would make regarding midwifery education respondents' replies included the following: *improve the quality of instructional equipment; train obstetric specialized instructors; support materials for training midwives; open the code for junior college[34] and university-level midwife; continuing medical education; there is a need for short-term training courses to strengthen training skills and qualifications for the school's instructors; retrain instructors to implement competency-based training; retrain the clinical guides (adjunct instructors) on how to teach clinically according to competencies; and provide adequate equipment.*

### *3.5.2. Upgrade training*

Training programs to upgrade from lower to higher-level qualifications have been put in place and evolved over time. In 1998, a policy for in-service training was issued by the MOH (06/1998/TT-BYT) allowing secondary midwives working in the public sector to obtain a junior-college midwife degree at one university in the south (HCMC Medical and Pharmaceutical University) and one junior college in the north (Nam Dinh Junior College of Medicine, now Nam Dinh Nursing University), which were specifically designated for this task.

As of 2016, currently employed secondary midwives can be upgraded to junior college midwife level through an additional 18 months of training and clinical practice, with various training programs allowing midwives to work during the week and attend evening and weekend classes. Similarly, midwives with junior college qualifications can obtain an additional 18 months of training to upgrade to university-level OB nursing degrees. Current regulations also require that a medical school have recruited at least three classes of direct-entry midwives before it can enrol upgrade students, which may unnecessarily limit the overstretched capacity to provide upgrade training over the next 10 years (Circular 08/2015/TT-BGDDT). Similar requirements apply to university-level midwifery training programs, which means Nam Dinh Nursing University will not be able to provide upgrade training until 2019. Another problem may arise in recruitment since awareness of the university midwife or university-level nurse-midwife and OB nursing degree remains low. One survey respondent commented that, *"Secondary midwives and junior college midwives really want to get a university midwife degree, but so far no training establishment is providing this level of training".*

Interviews with the MOH and other stakeholders revealed that medical schools are left on their own to find investment resources to expand

34 *Note that one junior college was not aware that there has been a direct entry junior college midwife program since 2010.*

their capacity (e.g., infrastructure, equipment, instructors) to meet the massive retraining needs of the health system related to implementing Circular 26. These schools obtain recurrent budget funds from provincial budgets and from collecting training fees from trainees. Some problems may arise for provinces without medical colleges if the provinces that have these colleges are unwilling to subsidize the training of midwives from neighbouring provinces.

### *3.5.3. Continuing medical education*

Medical knowledge is constantly being updated, leading to the need for all health workers to continuously update their professional knowledge. Circular 22/2013/TT-BYT guides implementation of continuing medical education generally for the health sector in Viet Nam. We did not find any mechanism currently in place to collect information centrally about compliance with continuing medical education requirements in order to provide statistical information about the proportion of midwives or midwifery service providers who have received continuing medical education on relevant areas of expertise.

The MCHD has designed or collaborated in designing and implementing a number of important training modules to update the midwifery workforce on various technical areas. A list of continuing medical education training programs is provided in Table 34, showing a diversity of contents from strengthening skills of VBAs and responding to OB emergencies to auditing maternal mortality cases, care and treatment of newborns and children, strengthening skills of district NICUs, advising on reproductive health, prevention and control of STIs, RTIs and HIV, developing pedagogical skills, and introducing new guidelines. The reports on continuing medical education do not indicate whether these continuing medical education courses count towards requirements for the 48 hours. Information on the number or even type of trainees is not always complete. There is also little information on whether these continuing medical education courses are the ones needed by medical facilities to fill gaps in knowledge, or whether they are offered in a more top-down approach. Many of the courses are training of trainers, with the expectation that provinces will implement training of service providers in all facilities with need. However, funding sources are not clear and the actual share of professionals in need of training who received it is not known. Many of the courses were designed and implemented as part of international donor-funded projects, and it is not certain that those training programs will be institutionalized into standard continuing medical education training programs for midwifery workers that will continue to be implemented over time and updated periodically as new knowledge is gained. As of 2012, 100 medical schools, 50 hospitals, institutes, the Viet Nam nursing association, and other clinical settings in 20 provinces have been approved for providing certified continuing medical education training (Decision 492/QD-BYT in 2012).

## Table 34: Continuing medical education training programs related to midwifery developed and implemented from 2010 to the present in Viet Nam

| Training program | Duration | Trainees | Year approved/ source of information |
|---|---|---|---|
| **VBAs** | | | |
| Advanced VBA training (focused on detecting and first response to OB emergencies and referrals) | 6 months | VBAs who have completed 6 months basic training | MOH Decision 2531/QD-BYT 15/7/2013 |
| **Safe motherhood** | | | |
| SBA training materials and program for OB workers (following SBA skills list in MOH Decision 3982/QD-BYT in 2014) | 5 to 13 days | Secondary and higher-level midwives and OB-paediatric assistant doctors; GPs, general assistant doctors, nurses, and elementary midwives | ASTT Decision 162/QD-K2DT on 3 October 2014. |
| Maternal mortality audit | 2-5 days | Provincial maternal mortality audit committee members and health workers | MOH Decision 4236/QD-BYT in 2010 |
| Essential maternal neonatal health care during and immediately after birth (interventions recommended recently by WHO) | 5 days | Doctors and midwives working in OB department of provincial general or specialized hospital | MOH Decision 4673/QĐ-BYT in 2014 |
| **Neonatal care** | | | |
| Care and treatment of newborns for district-level NICU | 28 days TOT, 3 months for district teams | TOT-Teams (doctor + nurse) at provincial NICU. District hospital NICU teams (doctors + 2 nurses) | Project-based training documents |
| Care and treatment of underweight, pre-term and sick newborns | 28 days for TOT, 3 months for district staff | TOT (teams of doctors and nurses in provincial NICU) Neonatal teams of 1 doctor and 2 nurses in district hospital paediatric department | Project-based training documents |

| Training program | Duration | Trainees | Year approved/ source of information |
|---|---|---|---|
| **Abortion services** | | | |
| Medical abortion | n/a | TOT for provincial doctors (in RH centre or OB dept. of hospital) | Annual report of MCH dept. 2014 |
| Safe abortion (vacuum aspiration < 7 weeks gestation) | 4 weeks | Commune health station, polyclinic, maternity home | Annual report of MCH dept. 2012 |
| **IEC, BCC, communication** | | | |
| Skills for direct communication on MCH care | 3 days | VHWs, VBAs, community communicators | MOH Decision 5172/QD-BYT in 2012 |
| Improve RH and safe motherhood advising skills | n/a | Provincial trainers of VHWs; VHWs, and Women's Union microcredit groups | MCH annual report 2012 |
| **RTI, STI, PMTCT, cervical cancer screening** | | | |
| PMTCT integrated into the RH care system | 5 days | Obstetricians and paediatricians at provincial and district level; no midwives | MCH 2014 annual report |
| RH for older people (RTI and cervical cancer screening) | 3 days | Provincial trainers, service providers at all levels | MCH dept. annual report 2012 |
| Cervical exam and extraction of cervical cells for Pap smear | 4 weeks | Provincial or district health workers in project provinces | MCH dept. annual report 2012, 2013 |
| **Other** | | | |
| Essential RH care | 10 days | TOT for provincial hospital and RH centre. RH workers at all levels within province. | Reported in MCH annual report in 2012. |
| National RH guidelines (2009) (overview) | 20-22 days | Secondary midwives, OB-paediatric assistant doctors, GPs, neonatologists, and neonatal nurses | Approved 2012 |

| Training program | Duration | Trainees | Year approved/ source of information |
|---|---|---|---|
| Youth friendly services and organization of youth health clubs | 5 days | Provincial trainers | MCH annual report 2012 |
| Guiding organizational skills for youth RH care activities | n/a | Provincial trainers | MCH annual report 2013 |
| Integrating RH, HIV, and domestic violence prevention | | Health workers in areas with high risk of STIs | MCH annual report 2014 |
| Pedagogical methods for basic medical training | 7 days | Provincial trainers | MCH annual report 2012 |
| Pedagogical methods for continuing medical education training | n/a | Provincial continuing medical education trainers | MCH annual report 2013 |
| Practice models for continuing medical education in obstetrics and paediatrics | n/a | Provincial doctors (OB, Paediatrics, ER) | MCH annual report 2014 |

*Note: RH=reproductive health; MNH=maternal and neonatal health; TOT=training of trainers; ER=emergency room; GPs=general practitioners; BCC=behaviour change communication. The blue highlights mean specific references to midwifery/midwives*

*Source: MCHD Summary of Training Programmes in Reproductive Health, Maternal, Newborn, Child Health and Nutrition and MCHD annual reports 2012-2014.*

Continuing medical education is now required for practitioners to maintain their professional certification according to Circular 22/2013/TT-BYT, yet many details of policy implementation are still being worked out. It is not known which of the above continuing medical education courses would count towards the requirements of Circular 22. At present it does not seem that achievement of continuing medical education training helps midwives to expand the scope of practice beyond basic midwifery in their professional certification. For example, in Australia midwives who want to be able to prescribe basic OB medication must first receive training and certification for this expanded scope of practice [226]. Similar expanded scope of practice could be considered for areas such as IUD insertion, contraceptive implants and injections, or for vacuum aspiration and medical abortion in early stages of gestation - if these are not generally allowed for midwives with 3-years of training.

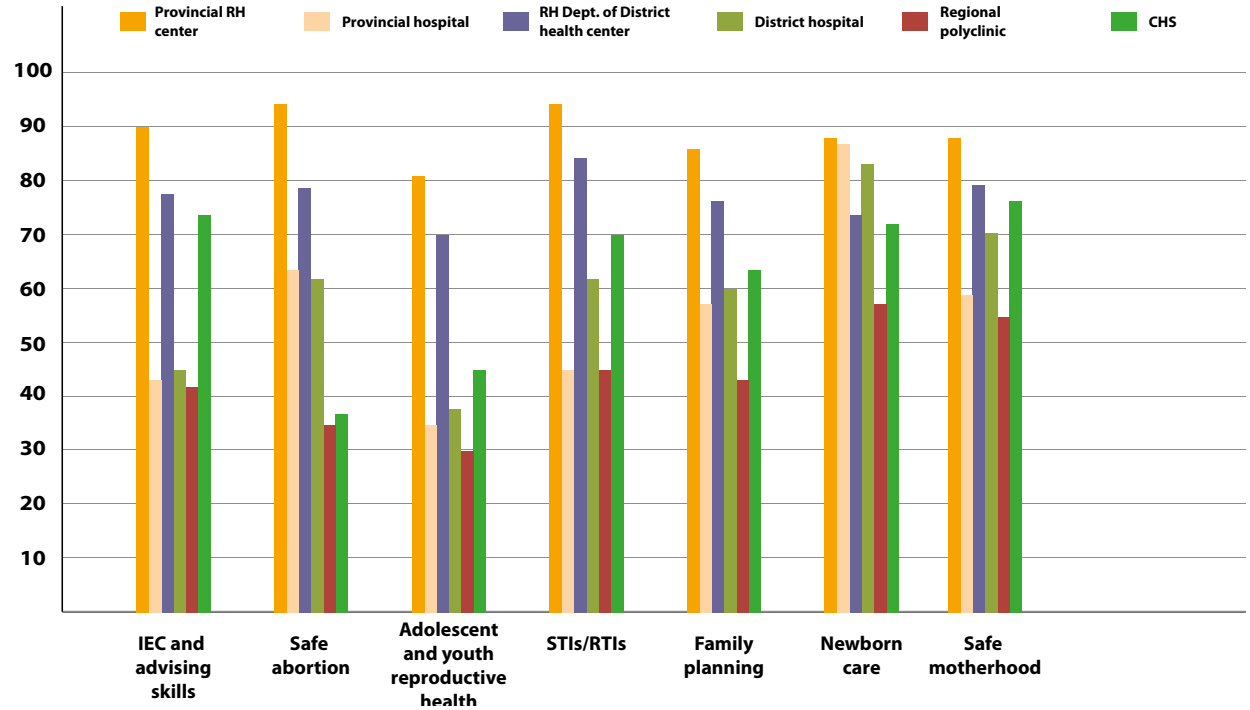
Continuing medical education requirements are not yet part of the national benchmarks for commune health (MOH Decision 4667/QĐ-BYT in 2014). However, to gain trust in the quality of commune health stations as a birthing facility, it might be useful to create standards for commune health station birthing facilities that require commune health station midwives to have attained continuing medical education certificates in OB emergencies, screening for STIs, advising mothers about health during pregnancy, postpartum care for mothers up to 6-weeks, essential early newborn care, or other relevant skills such as safe abortion or IUD insertion. A good example of this is in the Philippines.

PhilHealth insurance requires that non-hospital birthing homes must be accredited.[35] Part of the accreditation requirements include the qualifications of the staff. For staff with low-level qualifications, additional continuing medical education certification can help the facility to achieve accreditation standards without staff having to obtain a higher degree.

The best data available at present about the extent of continuing medical education training coverage in Viet Nam comes from the 2010 MCHD inventory. The results indicate that a relatively high share of government commune, district, and provincial-level facilities have staff who have received continuing medical education in midwifery-related contents during the 2008-2010 period (Figure 61). The two types of facilities that are most likely to have received continuing medical education for their staff for almost all training contents are the provincial reproductive health centre and reproductive health department of the district health centre, while the facilities that are least likely to have obtained this training for their staff are the regional polyclinics and provincial hospitals. Commune health stations report having received training for their staff on most of the topics listed, except for safe abortion and youth and adolescent reproductive health services; the proportion of facilities whose staff have received training in these areas is somewhat lower. Interestingly, a higher share of commune health stations than district hospitals has received training in safe motherhood, family planning, STIs/RTIs, youth and adolescent reproductive health, and IEC and advising, but the reverse is true for newborn care and safe abortion.

35 *See PhilHealth Circular No. 30s.2009, Amendment to PhilHealth Circular No. 15 s. 2001 (Guidelines for accreditation of Providers for the Maternity and Newborn Care Package). https://www.philhealth.gov.ph/circulars/2009/circ30_2009.pdf.*

**Figure 61: Percentage of facilities in Viet Nam whose health workers have received training in various midwifery-related services, 2010**




*Source: MCHD Survey 2010 [20].*

### *3.5.4. Midwife Association*

VAM *[in Vietnamese Hội Nữ hộ sinh Việt Nam]*[36] is a non-governmental body that contributes to advocating for the midwifery profession and for its members (Box 3). It is one of the pillars supported by ICM to help in achieving the Midwifery 2030 agenda.

36 *In Vietnamese the name of the association is Viet Nam Association of Female Midwives. Some male midwives are now being trained so the name may need to be changed.*


### Box 3: Overview of the Viet Nam Association of Midwives

VAM was established under Prime Ministerial Decision No. 657/TTg dated 16 October 1995. The VAM joined the Viet Nam Medical Association and became a member of the ICM soon afterwards.

A strategy for VAM development through the year 2015 was developed and implemented. The VAM vision for 2015 called for the association to be active in reproductive health to contribute to implementing the National Strategy on Reproductive Health Care in the community, particularly in safe motherhood, and reducing maternal and newborn mortality. As of 2016, there is no update for the VAM development strategy into the future.

VAM has 15 provincial midwifery associations with about 3,500 members according to its website. VAM organizes many continuing medical education courses on topics such as active management of the third stage of labour and on family planning and safe abortion, as well as essential early newborn care, although it is not yet approved as an official continuing medical education provider that can award continuing medical education-certified courses. It also organizes many seminars to share information. UNICEF, Pathfinder, and the Japanese Midwifery Association have been important partners in VAM development.

VAM is regulated by Government Decree No. 45/2010/ND-CP regulating organization, activities, and management of professional societies. A draft Law on Associations is being debated and discussed and may lead to a stronger professional role for VAM in the future, such as more active participation in developing professional guidelines and advocating for a midwifery model of reproductive health care.

Table 35 indicates that VAM does perform most roles that ICM considers fundamental roles of a professional midwifery association, although it, and its midwife members, could be contributing even more. VAM has begun to be more actively involved in policymaking by contributing to development of the basic standards for Vietnamese midwives (342/QĐ-BYT 2014). However, greater engagement by the association in the licensing process (e.g., assessing competencies as part of a midwife council, auditing suspected midwife malpractice), in technical support and development for its members (e.g., commissioning continuing medical education training institutions and helping to develop contents or participating more in training of midwives that meets continuing medical education requirements for professional certification), in research on midwifery interventions, and using its voice to advocate on technical issues (improving respectful care and avoiding over servicing) remains limited.

**Table 35: Current status of SoWMy indicators for professional associations, applied to the Viet Nam Association of Midwives (VAM)**

| Professional Associations | |
|---|---|
| Year of creation of professional midwifery association | 1995 |
| **Roles performed by midwifery association** | |
| Continuing professional development | Yes, but not a regular activity, only when funding is available. |
| Advising on representing members accused of misconduct | No, In fact, the Association rules call for removing such individuals from membership |
| Advising members on quality standards for maternal and neonatal health care | Yes, but other agencies play stronger role in this task |
| Advising the Government on policy documents related to maternal and neonatal health | Yes, but seldom done |
| Negotiating work or salary issues with the Government | No, the government salary scales apply to midwives |

### *3.5.5. Sexual, reproductive, maternal, and newborn health guidelines (SRMNH)*

An important basis for developing curriculum and quality control measures is the existence of evidence-based national guidelines. The list of all current SRMNH guidelines in Table 36 shows that there is a rather complete set of SRMNH guidelines available and most of them were issued within the past 10 years. The National Reproductive Health Guidelines were first issued in 2002, updated in 2009, and a new update was apparently issued in 2016.

**Table 36: Reproductive health and maternal and child health guidelines contributing to strengthening quality of midwifery services in Viet Nam**

| Policy code and date | Policy name | Role of midwives indicated? | Evidence base indicated? |
|---|---|---|---|
| MOH Decision 4361/QĐ-BYT 7 November 2007 | Issuing the care and treatment procedures for PMTCT | No | No |
| MOH Decision 3384/QD-BYT 10 September 2008 | Issuing technical procedural guidelines for using the CPAP respirator for neonates | No | No |
| MOH Decision 3821/QD-BYT 3 October 2008 | Issuing guidelines and treatment protocols for PMTCT by using ARVs | No | No |
| MOH Decision. 4620/QD-BYT 25 November 2009 | Issuing the national guidelines on reproductive health services [replaced 2002 guidelines] | Yes | Yes |
| MOH Decision 573/QĐ-BYT 11 February 2010 | Issuing the procedures for prenatal and neonatal screening and diagnosis | No | No |
| MOH Decision 5231/QD-BYT 28 December 2010 | Approving guidelines for diagnosis and emergency treatment of OB emergencies (replaces 2000 guidelines) | No | No |
| MOH Decision 1142/QĐ-BYT 18 April 2011 | Approval of guidelines for organizing neonatal intensive care and neonatal corners in different level health facilities | Yes | No |
| MOH Decision 2620/QĐ-BYT 27 July 2012 | Issuing the "guidelines for implementing hepatitis B vaccination for newborns | No | Yes |
| MOH Decision 4568/QD-BYT 14 November 2013 | Issuing guidelines for diagnosis and treatment of STIs | No | Yes |
| MOH Decision 2919/QD-BYT 6 August 2014 | Issuing the guidelines for examination and treatment at commune/ward health stations | Yes | Yes |
| MOH Decision 4673/QD-BYT 10 November 2014 | Approving professional guidelines for essential maternal and newborn health during and immediately after birth | No | Yes |

| Policy code and date | Policy name | Role of midwives indicated? | Evidence base indicated? |
|---|---|---|---|
| MOH Decision 4674/QD-BYT 10 November 2014 | Guidelines for kangaroo mother care | | |
| MOH Decision 4869/QD-BYT 21 November 2014 | Guidelines for maternal mortality audit, first update and amendment | | |
| MOH Decision 4944/QD-BYT 27 November 2014 | National Guidelines for Prevention and Control of Micronutrient Deficiencies | | |
| MOH Decision 315/QD-BYT 29 January 2015 | Issuing the diagnosis and treatment guidelines for obstetrics and gynaecology | No | Yes |
| MOH Decision 3047/QD-BYT 22 July 2015 | Issuing management and treatment guidelines for HIV/AIDS care | No | Yes |
| MOH Decision 4068-QD-BYT 29 July 2016 | Issuing guidelines for drafting medical care pathways (includes ectopic pregnancy and C-section pathways) | No | No |
| MOH Circular 34/2016/TT-BYT 21 September 2016 | Regulations on examination and screening process to detect, treat, and resolve foetal anomalies and abnormalities | No | No |
| MOH Circular 38/2016/TT-BYT 31 October 2016 | Regulations on methods to promote breastfeeding in medical facilities | No | No |
| MOH Decision 6734/QD-BYT 15 November 2016 | Approval of professional guidelines for essential care of mother and newborn during and immediately after C-section | Yes | Yes |
| Draft available in 2016 | National Guidelines on Reproductive Health (updated version) drafted and is awaiting approval | Yes | Yes |

*Note: Evidence base includes cases where citations are given or a strong consultative process involving international and national experts was documented.*

### *Lack of midwife perspective and participation in developing guidelines*

An important shortcoming with the process of developing guidelines in Viet Nam is the weak voice of midwives in the process. The drafting committees listed on the reproductive health guidelines do not include midwives, but rather are dominated by national experts who are medical doctors. This may be appropriate for specialized OB/GYN disease treatment guidelines, but for overall reproductive health, much of which is preventive or involves minimal interventions to allow natural processes to unfold, midwives should have a stronger voice to reduce the medicalization occurring so strongly in Viet Nam. This situation is exacerbated by the fact that a large majority of instructors in the midwife training establishments are obstetricians, rather than midwives, which is due to the shortage of midwives with university or higher-level qualifications. VAM also does not seem to have been consulted, nor has it proactively participated, during the process of drafting the reproductive health guidelines, even though in most countries this is a key function of the national professional midwife association [14].

### *Need for mechanisms to ensure compliance with technical guidelines*

Existence of guidelines does not ensure that they are implemented, which has important implications for maternal and neonatal mortality. The MCH reporting system captured about 3,000 cases of OB complication and 86 deaths in 2012 (only about 10% of estimated maternal deaths). Among the reported complications, 63% were due to haemorrhage, 22.5% due to postpartum sepsis, and 15.2% due to eclampsia. A maternal mortality audit in 2012 indicated that maternal deaths are not concentrated in specific regions, but exist throughout the country. Two-thirds of the deceased mothers left one or more surviving children motherless. About half of the deaths audited occurred during birth or within 24 hours of giving birth, with another third of cases within 42 days of giving birth. About 38% of maternal deaths audited occurred at home or during transport to a medical facility. Delays in recognizing an emergency and in deciding to seek care, alone or in combination with other delays, contributed to more than half of maternal mortality in the audit. Delays in health worker appropriate response, alone or in combination with other delays, accounted for 45% of deaths. Finally, delays in accessing services due to distance or lack of means of transport contributed, alone or in combination with other delays, to 29% of cases audited [119].

Field visits as part of this study revealed no enforcement mechanisms, quality audit systems, overarching clinical governance frameworks, benchmarking or supervision systems, or routine drills to ensure preparedness for OB emergencies. Staff of medical schools and medical facilities in Viet Nam were not aware of all the national reproductive health and neonatal care guidelines. Maternal mortality audits have revealed that preventable deaths are occurring not only due to delays in families bringing women to a health care facility for care, but also due to delays in response of health care facilities, lack of emergency OB knowledge of the health workers, delays in detecting problems due to insufficient monitoring postpartum, and delays in referring to higher level facilities for care [119].

Viet Nam is, however, starting to put in place measures to ensure compliance and quality of implementation. For example, Decision 471/QD-BYT (2014) on quality of HIV outpatient treatment, Decisions 3994/QD-BYT (2015) and 5848/QD-BYT (2016) on reproductive health services and Circular 19/2013/TT-BYT (2013), and Decision 4858/QD-BYT (2013) and Decision 6858/QD-BYT (2016) to implement quality assurance in hospitals, all of which involve gathering substantial information on key performance indicators to monitor and compare quality of different services (or providers), including reproductive health and safe motherhood.

Continuing medical education requirements linked to maintenance of a practitioner

certification can also provide a core mechanism for moving guidelines into practice. The results of these efforts will depend heavily on whether the information from these systems is analysed effectively and evidence is used to provide appropriate support and supervision for underperforming facilities. Further information on regulation is provided in the next section.

***Measures to ensure patient satisfaction***

The MOH, with technical support from the Health Strategy and Policy Institute, is conducting a qualitative survey on client satisfaction in all hospitals under direct management of the MOH. Initial findings from this survey and a series of other surveys show the MOH's efforts in implementing solutions to improve quality of medical services in Viet Nam [227–229].

## 3.6. Legal framework

Viet Nam has an extensive legal framework for the health sector, which encompasses reproductive health. In addition, in recent years it has developed a large number of legal documents specific to midwives, midwife training, and midwifery services. This section first introduces the ICM standards, then introduces the governance structures surrounding midwifery, summarizes the major achievements in midwifery regulatory development in Viet Nam, then addresses each of the key areas of midwifery regulation to present the latest policies and some commentary about their contents and existing conflicts. The section ends with a quick review of the current state of Vietnamese midwifery regulation and recommendations for further actions in relation to ICM standards and existing problems within the Vietnamese system.

### *3.6.1. Introduction to the International Confederation of Midwives (ICM) global standards for midwifery regulation*

According to the ICM, "Midwifery regulation is the set of criteria and processes arising from the legislation that identifies who is a midwife and who is not, and describes the scope of midwifery practice. The scope of practice is those activities which midwives are educated, competent and authorised to perform. Registration, sometimes called licensure or professional certification, is the legal right to practice and to use the title of midwife. It also acts as a means of entry to the profession. The ***primary reason for legislation and regulation is to protect the public from those who attempt to provide midwifery services inappropriately***. In some countries, midwifery practice is regulated through midwifery legislation whilst in others regulation is through nursing regulation. It has become increasingly apparent that nursing legislation is inadequate to regulate midwifery practice [230]."

The ICM further calls for regulations to ensure safety of the public through six functions:

1. Setting the scope of practice;
2. Pre-registration education;
3. Registration (licensing);
4. Relicensing and continuing competence;
5. Complaints and discipline; and
6. Code of conduct and ethics.

This section follows this analytic framework to assess the status of current midwifery regulations in Viet Nam. The lists of detailed policy documents can be found in Annex 5. The assessment tool used to inform a gap analysis process for the strengthening of midwifery regulations was adapted to the Viet Nam situation to aid in making the assessment of the completeness and appropriateness of the legal framework according to ICM standards. Unfortunately, it was not possible to fully assess the extent to which these regulations are enforced or implemented.

A summary of midwife regulations in Viet Nam as of 2016 is presented in Table 37 based on the SoWMy 2014 country profile template.

Viet Nam's regulatory framework development meets four of the seven indicators. It falls short by not having a live registry of licensed midwives, restricting midwife authority to provide emergency obstetric and newborn care (EmONC) basic signal functions and limiting provision of injectable contraceptives and IUDs only to midwives with university-level training. In comparison with the other 73 countries with profiles in SoWMy 2014, Viet Nam is doing relatively well. It is among 36 countries that has legislation recognizing midwifery as an autonomous profession,[37] one of 57 with a recognized definition of midwife, one of 67 with a government midwifery regulatory body (although Viet Nam has many different regulatory bodies for different aspects of regulations), and one of 34 requiring a license to practice midwifery. However, it is among the 35 countries without a live registry[38] of registered midwives. In addition, it is not among the 37 countries reporting that midwives are authorized to provide all seven EmONC basic signal functions (due to Vietnamese restrictions on midwives providing assisted instrumental delivery by vacuum extractor). Restricting authorization for providing injectable contraception and IUD insertion to only midwives with university-level education basically means that Viet Nam is one of the seven countries not allowing midwives to provide injectable contraception and one of the 11 countries not allowing midwives to insert and remove IUDs [14] among the 73 countries profiled in the SoWMy 2014.

37 *An autonomous profession is understood to mean two things. First, midwives are a separate occupation from nurses, with different training and scope of work. Second, midwives work autonomously, making clinical decisions on behalf of the client within the scope of training rather than simply following doctor orders.*

38 *A live registry is understood as a continuously updated list of all registered midwives, as well as midwives who have had licenses revoked or have other restrictions on their scope of practice. It should include also the qualifications of the midwife and any limitations on scope of practice. An example for New Zealand is available at https://www.midwiferycouncil.health.nz/register-search.*

**Table 37: Current status of midwifery regulation indicators from SoWMy**

| Midwifery Regulation | |
|---|---|
| Legislation exists recognizing midwifery as an autonomous profession | Yes |
| A recognized definition of a professional midwife exists | Yes |
| A government body regulates midwifery practice | Yes |
| A license is required to practice midwifery | Yes |
| A live registry of licensed midwives exists | No |
| Number of EmONC basic signal functions that midwives are allowed to practice (out of a possible 7) | 1 authorized, 1 not authorized, 5 allowed in emergency or with doctor supervision |
| Midwives allowed to provide injectable contraceptives/ IUDs | Yes/Yes, but only if have university or higher level degree |

### *3.6.2. Viet Nam's regulatory system*

***Midwifery governance structures***

The main regulatory body for the midwifery profession is the MSA within the MOH, which manages the professional registration system for all medical professions (Table 38). The division of nursing and dietary regime within the MSA has an expert with a nursing background who is also responsible for midwifery practice in hospitals and midwife professional development in collaboration with the MCHD. The MSA also has responsibility for central hospitals. The MSA works in collaboration with the MCHD to advise on maternal and newborn healthcare policy and to set standards for midwifery practice (competencies, birth attendance skills). It has some regulatory authority over provincial reproductive health centres, but not hospitals providing midwifery services, as these are regulated by the MSA.

The MCHD, together with the DOP and the ASTT, protects the professional title of "midwife". The MCHD works with the ASTT to regulate continuing medical education in reproductive maternal and child health. The DOP is responsible for setting the scope of practice for midwives, which is used both for determining training curricula and for professional registration. The ASTT is responsible for setting standards and ensuring quality of midwifery training along with MOET for university and higher education and with the Ministry of Labour, Invalids and Social Affairs (MOLISA) for junior college and secondary midwifery training. So far, assessment of midwifery competencies at graduation is the responsibility of the training establishments and the facilities where midwives perform their post-graduate supervised practice.

## Table 38: Assessment of functions and responsibilities of midwifery regulatory bodies in Viet Nam

| Functions and responsibilities | Regulatory body (or bodies) responsible |
|---|---|
| Advising the government on maternal and newborn healthcare policy | MCHD (MOH) |
| Setting standards for midwifery practice | MCHD (MOH) |
| Registration of practicing midwives (nurse-midwives, nurses specialized in OB/GYN) | MSA (MOH) |
| Verification of midwives (nurse-midwives and nurses specialized in OB/GYN) joining the workforce from other countries | MSA (MOH) as part of registration |
| Establishing the scope of midwifery practice | DOP (MOH) and MOHA |
| Protection of the professional title "midwife" | MOH (ASTT, MCHD, DOP) |
| Setting standards for professional ethics | MOH (07/2014/TT-BYT Code of Conduct) |
| Applying sanctions to midwives (nurse-midwives, nurses specialized in OB/GYN) found guilty of misconduct | MOH, local governments according to 176/2013/ND-CP generally for all health workers |
| Investigating alleged misconduct or incompetence | MSA (MOH) leads the organization of professional councils in determination of professional misconduct in medical care |
| Setting standards for education | ASTT (MOH) together with MOET (university) and MOLISA (junior college and below) |
| Accreditation of education institutions | MOET (university) and MOLISA (junior college and below) |
| Ensuring the quality of education | MOET (university) and MOLISA (junior college and below) and ASTT (MOH) |
| Assessing competency prior to registration | Medical training facilities assessment of competencies to graduate and post-graduate supervised practice facility after 9 months of work. |
| Continuing professional development or continuing medical education | MCHD and ASTT (MOH) |

*MSA=Medical Services Administration; MOH=Ministry of Health; ASTT=Administration of Science, Technology and Training; MOET=Ministry of Education and Training; MCHD=Maternal and Child Health Department; MOHA=Ministry of Home Affairs; Department of Organization and Personnel; MOLISA=Ministry of Labour, Invalids and Social Affairs.*

Viet Nam's Law on Examination and Treatment is the legal basis for the MOH to establish an advisory committee for medical professional registration (MOH Decision 2803/QĐ-BYT in 2013). It includes a sub-committee on nursing and midwifery, with a narrow scope of work including advising about issuing, re-issuing, and revoking professional registration and suspending the professional activities of midwives. Other general sub-committees work on issues like training, continuing medical education, resolving grievances, and databases of registered medical professionals. However, they lack specialization related to the various medical professions like midwifery, which may be one reason for the lack of consistency between midwifery curricula, the profession's scope of work, and continuing medical education training programs, and the lack of coordination within the health sector on development of the midwifery profession.

A wide range of countries have an occupation-specific council for regulating the midwifery professional, including New Zealand, Canada,[39] the United Kingdom,[40] Tamil Nadu State in India,[41] Nigeria,[42] Cambodia, [43] Thailand,[44] Bangladesh,[45] and many others. New Zealand and Thailand offer good examples of effective midwifery councils.

In New Zealand, the Midwifery Council's role is defined in the Health Practitioner's Competence Assurance Act (2003), which stipulates the general regulatory framework for all health practitioners, but establishes separate regulatory authorities for each profession. The primary purpose of the act is to protect the health of the public by ensuring that health professionals are competent and fit to practice. They do this through the councils, such as the Midwifery Council, which define the scope of practice and boundaries of the midwife profession, establish mechanisms for proving professional competence for registering as a midwife, determine the requirements for continuing professional competence when midwives renew their practice registration every year, and have authority to suspend the midwife registration or impose conditions or limits on the midwife's scope of practice. The members of New Zealand's midwifery council are appointed by the Minister of Health for periods from one to three years, and may be reappointed at the end of their term. The council members include qualified midwives and lay members.[46]

In Thailand, the Royal Decree of Professional Nursing and Midwifery Act (1985, updated in 1997) established the Thailand Nursing and Midwifery Council. Its purpose includes regulation and promotion of midwifery and nursing professions. Specific tasks include professional midwife registration, suspension, and revocation of licenses, approving midwifery curriculum and educational programs for certification, and accrediting academic institutions offering midwife training. The Nursing and Midwifery Council Committee consists of 32 members, half of whom are appointed by the Government (including the President of the Thai Nurses' Association and representatives from various ministries, the Red Cross Society, and the Bangkok Metropolitan area, and half of whom are elected among the membership.

39 http://www.cmrc-ccosf.ca/

40 https://www.nmc.org.uk/

41 http://www.tamilnadunursingcouncil.com/

42 http://portal.nmcnigeria.org/

43 http://www.cmidwivesc.org/?lg=en

44 http://www.tnc.or.th/en

45 http://www.bnmc.gov.bd/

46 https://www.midwiferycouncil.health.nz/about-us/legislation

***Recent achievements in Viet Nam's midwifery regulatory system***

Table 39 presents a summary of recent achievements in midwifery regulatory development. While regulatory development in other areas, such as for professional regulation, do affect midwives, those developments are not specific to midwives or midwifery and are therefore not summarized here (they are discussed below within the ICM regulatory assessment framework). Midwife regulatory development achievements have moved Viet Nam more solidly into alignment with ICM and ASEAN standards. However, it must be noted that this has also created substantial stresses on the existing system because of the speed of change inherent in the roadmap and requirements to rapidly upgrade almost the entire midwife workforce from secondary to junior college or higher levels of qualifications, and to shift a substantial share of midwifery work (particularly clinical contraception and abortion) to doctors.

## Table 39: Significant achievements since 2010 related to midwifery-specific regulations in the legal framework of Viet Nam

| Achievement | Policy documents | Importance |
|---|---|---|
| Set scope of work and professional registration of midwives | • Circular 26/2015/TTLT-BYT-BNV regulating the codes, and standards for nursing, midwifery, and medical technician occupations | • Sets scope of midwife practice for registered midwives in the general health professional regulation system (although some limitations have been noted). |
| Set competency standards | • Decision No. 342/QĐ-BYT (2014) approving the basic competency standards for Vietnamese midwives<br>• Decision 3982/QD-BYT (2014) Approving guidelines on basic skills for birth attendants | • Midwife competencies serves as the basis for both pre-service training and scope of work regulations.<br>• Guidelines on basic skills for birth attendants serves development of continuing medical education training to ensure all grassroots-level health workers can perform these essential midwifery tasks competently.<br>• Both sets of standards align Viet Nam with ICM standards. |
| Set pre-service curriculum and training facility standards | • Circular 11/2010/TT-BGDDT issuing the tertiary health sciences curriculum, for junior college level (includes nursing and midwifery).<br>• Bachelor's in midwifery (4-year curriculum framework) was endorsed in Official Instruction 9513/BYT-K2DT dated 27/12/2015<br>• Official Instruction 322/K2DT-DH dated 5/5/2015 on the training package for instructors implementing competency-based midwife training.<br>• 659/QĐ-BYT (2015) Issued professional conditions to ensure university and junior college midwifery training in Viet Nam<br>• Draft decree developed to replace Circular 09/2008/TT-BYT guiding collaboration between health worker training facilities and training hospitals for training, research and health care of the population. | • These competency based curricula move Viet Nam's midwifery training towards ICM standards.<br>• With the 4-year program, there is now a full range of midwifery training programs (from secondary to university).<br>• The professional conditions for training midwives pushes facilities to ensure they meet quality requirements to effectively implement the curriculum.<br>• Better arrangements between practice facilities and training institutions should improve quality of training and competency acquisition by midwives. |
| Set VBA scope of work and curriculum | • Circular 07/2013/TT-BYT regulating standards, functions, and tasks of VHWs (with special sections on VBAs)<br>• MOH Decision 2847/QĐ-BYT (2012) approved competency based training materials for VBAs | • Formalized and standardized the quality of VBAs to serve ethnic minority and disadvantaged areas to contribute to reducing disparities. |

### *3.6.3. Setting the scope of midwife practice*

The key policies related to setting the scope of midwife practice are Joint Circular 26/2015/TTLT-BYT-BNV for midwives and Circular 07/2013/TT-BYT for VBAs. From the service delivery side, there is also scope on which ***facilities are allowed to provide different midwifery services.*** MOH Decision 385/2001/QD-BYT determines which reproductive health services should be available at different types of health facilities. More recently, MOH Circular 43/2013/TT-BYT provides a similar document for all health services, but leaves the decision of which facilities will provide these services to the discretion of the local health authorities.

Circular 26 replaced Circular 12/2011/TT-BYT in an effort to bring Viet Nam's health personnel requirements in line with those of ASEAN. The ASEAN Mutual Recognition Arrangement on Medical Practitioners had four objectives: to facilitate mobility of medical practitioners within ASEAN; exchange information related to mutual recognition of medical practitioners; promote adoption of best practices on standards and qualifications; and provide opportunities for capacity building and training of medical practitioners. The arrangement requires that midwives have completed required professional medical training and have been licensed by the professional medical regulatory authority in their country of origin as being technically, ethically, and legally qualified to undertake professional medical practice. Different ASEAN countries have different origin country requirements for professional registration, although many countries have adopted the ICM competencies as the basis for their regulations. In Cambodia, for example, the requirements are that midwives have specific competencies to perform their tasks and that they maintain their skills through continuing medical education. In Viet Nam, the requirements require a specific midwife training qualification. Midwife councils in ASEAN nations play an important role in ensuring that competencies comply with this arrangement; some require competency examinations, while others require examination of the certifications of training and work experience. There does not seem to be a requirement about years of schooling, only about acquisition of competencies.

#### *Midwife scope of work and qualification-related job titles*

Circular 26 covers seven sets of midwife tasks: a) care of mothers, newborns, sick people, and health service users; b) reproductive health in the community; c) emergency and first aid; d) IEC, counselling, and reproductive health care; e) collaborative support in treatment; f) protection and enforcement of patient rights; and g) training, research, and professional development.

The scope of practice in the circular does not mention other important responsibilities for which midwives are being trained, including gynaecological services like breast and cervical cancer screening and detection of STIs, advising youth about reproductive health, reproductive health issues of the elderly (e.g., menopause), and participating in maternal mortality audits.

***Circular 26 includes requirements for educational qualifications*** and practical experience to fulfil this scope of work. The earlier scope of practice policy (12/2011/TT-BYT) had detailed scopes of work for five levels of midwife, from post-graduate, university, junior college, and secondary to elementary levels. In the process of professionalizing midwifery and raising Vietnamese professional standards to regional and global standards, the new policy excluded elementary midwives, and by 2025 it will exclude secondary midwives from the official professional title of midwife unless they upgrade their educational qualifications.

The new policies are built on the more recent training programs set up since 2003. However, the system has evolved over time and some categories of midwife qualifications have not been explicitly mentioned in the new circulars. In the past, secondary midwives underwent

much more extensive training than the current two-year program, with three years of training and three years of supervised practice. Obstetric-paediatric assistant doctors undertook two years of assistant doctor training then an additional six months specialized training in obstetrics and paediatrics. Obstetric specialized nurses and nurse midwives are two types of university-level midwife professionals whose professional codes indicate that they are nurses, even though their qualifications and scope of work are essentially similar to midwives. Current policies on scope of work and training fail to explicitly mention these types of midwives and an extensive search of legal documents failed to find legal or regulatory documents for these groups. While internally within the MOH these health professionals may be considered equivalent to secondary or university-level midwives, nevertheless, for the provincial health bureaus issuing practice certificates and for schools providing upgrade training, an explicit policy is required to ensure that these health workers have the same opportunities as those bearing the job title of midwife. The job description for general assistant doctors (10/2015/TTLT-BYT-BNV) does not fit the scope of work of OB-paediatric assistant doctors, although regulations on professional registration (41/2015/TT-BYT) do seem to suggest that the OB-paediatric assistant doctors are considered to have a scope of work that is equivalent to secondary midwives.

***Restrictions on authorized scope of practice***

Circular 26 imposes substantial limitations on the scope of services of secondary and junior college midwives. Secondary midwives have long been a key provider of clinical family planning services, such as inserting and removing IUDs and providing contraceptive injections, and are also a key early (<7 weeks) vacuum aspiration abortion provider at the grassroots level and at reproductive health centres, a scope of practice that was authorized for secondary midwives in Circular 12/2011/TT-BYT and was considered appropriate in the National Reproductive Health Guidelines of 2009 and 2016. These clinical contraceptive and abortion competencies are taught in the junior college midwife curriculum and are considered basic competencies that junior college midwives can perform (342/QD-BYT in 2014). It is likely that many secondary midwives also have acquired the competencies to perform these services through their pre-service training, continuing medical education, and experience. When Circular 26 came into effect in November 2015, it constituted a drop from 51,000 health workers providing clinical contraception and abortion services to only 18,000 health workers (obstetricians, general practitioners, and university-level midwives), thus shifting work that requires lower level qualifications to more highly specialized personnel who are likely to be overburdened by this higher workload. Junior college midwives and secondary midwives (Midwife level IV) are now only authorized to provide counselling on family planning, rather than actually inserting IUDs or implants, or providing injections.

Authorization to provide various types of surgeries and procedures, like OB surgeries, sterilization, or abortion, is given in MOH Circular 50/2014/TT-BYT, which assigns the head of the health care facility responsibility to allocate work responsibilities to midwives or other staff based on knowledge of their skills and training. No documents were found indicating the qualifications or certification required for different types of health providers to provide different technical services, in order to ensure safety and effectiveness. For example, performance of ultrasound requires the practitioner to have a certain level of training to minimize the exposure of the foetus, and to properly read the findings of the imaging investigation. But regulations on this do not seem to be in place. Similarly, no regulations were found for performing abortion services, or on which types of abortions midwives could perform and which required an obstetrician, although Circular 26 does limit level IV (secondary and junior college-level) midwife provision of abortion services.

Drug prescribing is regulated by Circular 05/2016/TT-BYT for outpatient care and Circular 23/2011/TT-BYT for care at facilities with inpatient beds. According to these regulations, drug prescribing is generally the responsibility of doctors, with restrictions on doctors at the commune health stations to prescribe only within the authorized scope of the commune health station practice. Assistant doctors in commune health stations and district hospitals are also allowed to prescribe drugs, with similar restrictions on their scope of practice, and the additional requirement for district authorization for outpatient drug prescriptions. ***Midwives, however, do not have prescribing privileges,*** except in the case of OB emergencies during deliveries at commune health stations when a doctor or assistant doctor is not present. [47] However, this conflicts with the National Guidelines for Reproductive Health (Decision 4620/2009/QĐ-BYT) which specifies that midwives are one of the key providers responsible for providing various routine reproductive health services, many of which involve use of prescription drugs. Specific items that may be affected by this policy include contraceptive pills and devices for family planning services, medications needed to perform medical abortion, tetanus vaccination for pregnant women, antibiotic treatment for STIs, malaria treatment, oxytocin during active management of the third stage of labour, local anaesthesia during episiotomy or vacuum aspiration abortion, Vitamin K injections, and hepatitis B and BCG vaccinations for newborns. It is not clear from the current Circular 26 whether these items are considered part of providing care for mothers and children, or whether these all require first requesting a prescription from a medical doctor in charge of treatment. The concern is whether requesting a prescription from a doctor for an essential routine part of service provision would lead to under-provision or delays. While there may be concern about whether midwives prescribing these medications have the appropriate level of training and supervision to ensure they follow national guidelines, authorization to prescribe specific drugs and devices or services could be made explicit in the scope of work authorized in the midwife professional registration, which could vary across individuals depending on their level of qualifications and which technical competencies they have acquired through continuing medical education. The scope of work could also vary across the settings where they practice, with greater autonomy given to commune health station midwives who may not always have a doctor to consult with.

***Obstetric and neonatal emergencies***

Obstetric and neonatal emergencies are important areas where midwives need to be able to respond quickly and autonomously within their professional capacity and skills, and not be hampered by limits to their scope of work. Circular 26 stipulates clearly that midwives are authorized to organize and implement initial first aid, OB emergency care, and emergency resuscitation of the newborn. Subsequently they should report in a timely manner and collaborate with the responsible doctor or transfer the patient to a higher-level facility. The 2009 Reproductive Health Guidelines also indicate that for most OB emergency services midwives are one of the key providers of care, especially at the commune health stations. In the prescription drug regulations, midwives are allowed to provide OB emergency drugs during delivery at the commune level if a doctor or assistant doctor is not present.

The SoWMy selected seven EmONC signal functions to assess whether midwives have an appropriate scope of work that allows them to respond appropriately in case of emergency (Box 4).

47 *Circular 23/2011/TT-BYT, Article 2, item 1d-"Hộ sinh viên tại các trạm y tế xã khi không có bác sĩ, y sĩ được chỉ định thuốc cấp cứu trong trường hợp đỡ đẻ." [midwives at commune health stations are allowed to prescribe emergency drugs in case no medical doctor or assistant doctor is available]*

**Box 4: The seven basic Emergency Obstetric and Neonatal Care (EmONC) signal functions and the extent of midwife authorization to implement them in Viet Nam**

1. **Administration of anticonvulsants** (MgSO¬4 and diazepam for pre-eclampsia and eclampsia): Midwives not explicitly authorized to provide this service without a doctor's prescription, but Circular 26 allows administration for emergency OB care.
2. **Parenteral administration of antibiotics** (pre-term rupture of membrane): Midwives not allowed to prescribe antibiotics in general.
3. **Administration of oxytocin** (haemorrhage): Midwives not explicitly authorized to prescribe oxytocin, even though this is an essential part of a normal delivery for active management of third stage labour. Circular 26 allows administration for emergency OB care.
4. **Assisted instrumental delivery by vacuum extractor:** Midwives not allowed to provide this service and equipment may not be available.
5. **Manual removal of the placenta** (Includes prescription of dolosal, antibiotic, oxytocin): Circular 26 allows midwives to do this in case of OB emergency to prevent haemorrhage due to retained placenta if they cannot transfer the woman in time to a higher-level facility.
6. **Newborn resuscitation with mask:** Midwives explicitly authorized to do this in Circular 26, but may not have the equipment.
7. **Manual vacuum aspiration for retained products:** Unclear as this is not covered in the reproductive health guidelines.

In Viet Nam, midwives are authorized to perform most of these signal functions in cases of OB emergency when a doctor is not present, with the exception of vacuum extraction assistance at delivery. However, evidence presented in the section on availability indicates that not all commune health stations actually are capable of providing all these services. Another concern is whether midwives are adequately trained to provide these services safely, especially since OB emergencies are so rare; it is important to have drills to practice the standard procedures to deal with OB emergencies in case they arise. Another concern is whether the relevant drugs are regularly available at commune health stations, as many are likely to expire before they would be needed. Specific drugs of interest here are antihypertensive drugs for pregnant women with elevated blood pressure, oxytocin in post-partum haemorrhage (in cases of pre-eclampsia or eclampsia), antibiotics for pre-term rupture of membranes, and corticosteroids to prevent respiratory distress in preterm infants.

***Village birth attendants***

Special attention continues to be paid in Viet Nam to ensuring ***universal access to reproductive health services,*** especially in remote and disadvantaged areas. The MOH has issued a policy allowing for VBAs with six months of competency-based training to fill this gap at the village level (Circular 07/2013/TT-BYT) in order to serve remote and disadvantaged areas with scattered populations and difficult geographic access to maternal health services, or areas with ethnic minority women who tend to avoid antenatal care, pregnancy management, and institutional delivery. VBA qualifications and scope of work are less than a registered midwife, but if they are trained they should have the necessary skills for attending births and providing basic midwifery services. A large part of their work is actually health IEC, preventive measures, and convincing women to seek maternity care at formal health facilities. The policy currently requires local governments to pay for the small stipend VBAs receive, but this is not always guaranteed, and is considered a weakness of the policy.

Circular 07/2013/TT-BYT authorizes VBAs to provide preliminary treatment in cases of complications in home deliveries, then to transfer to medical facility in a timely fashion. However, it should be noted that the instrument sets given to VBAs do not contain basic medicines or instruments that would be needed to provide treatment for OB emergencies. The VBAs main method to deal with an OB emergency is to convince the woman to seek an institutional delivery, especially if any risk factors are identified during pregnancy.

### *3.6.4. Pre-registration education*

State management of the medical training system, including training of midwives, is highly fragmented, falling under the Law on University Education and the Law on Vocational Training, and is under the administration of three ministries (MOH, MOLISA, and MOET). While the MOH is responsibility for the curriculum, competency standards, and scope of work of graduates from medical training, MOET is responsible for university-level medical training. Resolution No. 76/NQ-CP of the government routine meeting for August 2016 reassigned responsibility for junior college and secondary medical training to MOLISA. Viet Nam's education system follows a set of codes for different training programs. The midwife training codes are issued by MOET for secondary education under MOET Circular 34/2011/TT-BGDDT and for junior college under MOET Circular 14/2010/TT-BGDDT. The university-level midwife code has not yet been issued as discussed above. Midwifery education at all levels requires a substantial amount of coordination to ensure uniform quality of training and coordination to ensure that a student upgrading from a lower level to a higher level of education is not wastefully duplicating training content, and that all gaps in competencies in their initial education are filled in the upgrade training. In efforts to balance health worker labour market demand

and supply, coordination between these three ministries is crucial.

Viet Nam's health sector has worked very closely with UNFPA to develop a set of basic competencies of Vietnamese midwives (MOH Decision 342), which conforms to ICM standards and serves as the basis for midwife training programs and curriculum development. Official framework curriculum was put in place for secondary midwifery curriculum (MOH Decision 23/2003/QD-BYT), and junior college curriculum (MOET Circular 11/2010/TT-BGDDT). The university curriculum framework was endorsed by the ASTT (MOH) and introduced to all medical universities in Viet Nam in 2015. Basic conditions that schools should meet for providing junior college and university-level midwife curriculum that conforms to ICM standards were issued in MOH Decision 659/QD-BYT. The secondary midwifery curriculum has not been updated or revised to ensure that it is competency based, and it is likely that secondary midwife training will be phased out as health workers with secondary midwife training will no longer be allowed to work as midwives as of 2025. Competency-based curriculum for VBAs has also been issued in MOH Decision 2847/QD-BYT in 2012 on the basic module and in Decision No. 2531/QD-BYT (2013) on the advanced training module on midwifery skills for VBAs. Curriculum reform was already discussed in detail in Section 3.5 above.

Clinical practice is an essential part of any medical training. The health sector has put in place regulations guiding collaboration between health worker training schools and practice hospitals since 2008 (MOH Circular 09/2008/TT-BYT), and a draft revised version was developed in 2016. These regulations set out the rights and responsibilities of the two parties in order to facilitate expansion of, and ensure quality of, clinical practice experience.

### *3.6.5. Registration (licensing)*

The Law on Examination and Treatment (Law 40/2009/QH12) serves as the legal basis for registration of medical professionals. The policy is guided by Decree 87/2011/ND-CP and Integrated Circular 01/VBHN-BYT, which combines regulations from circulars 41/2011/TT-BYT and 41/2015/TT-BYT.

Professional registration of midwives follows the general procedures for professional registration of other health professions, except that the scope of practice and qualifications differ. Professional registration is lifelong and does not require periodic re-issuing of licenses. To obtain a license initially, the midwife must submit an application, with some basic bureaucratic requirements such as certification of no criminal history, health status certification, and personal *curriculum vitae*. Professional requirements for midwifery certification include a notarized copy of the midwife diploma (secondary level or higher) and certification from an assigned clinical supervisor of the 9-month process of practicing midwifery after graduation in an OB department or maternity home. The scope of practice recorded on the practice certificate follows Circular 26 discussed above in the section on scope of practice. There is a nursing and midwifery sub-committee of the MOH's advisory council for granting practice licenses (2803/QĐ-BYT in 2015), but its scope of work is quite limited as discussed above in Section 3.6.2.

Due to changes in the educational system surrounding midwife training over time, there exist several alternative paths for individuals to become a midwife, including direct-entry midwife training, OB-paediatric assistant doctor, and OB nurse training. Currently about 31,000 midwives are certified in Viet Nam to practice according to the MSA. It is understood that these registered midwives include those trained specifically as midwives, but also as OB-paediatric assistant doctors and OB nurses. There does not appear to be any regulation on how those alternative paths to becoming a midwife are assessed for equivalence in issuing midwife certificates, which may lead to differences in how the policy is implemented at the provincial

level. This could lead to a shortage of registered midwives in provinces that register OB nurses as nurses and OB-paediatric assistant doctors as assistant doctors, with different scopes of practice on their certificates.

### *3.6.6. Relicensing and continuing competence*

Viet Nam does not have a policy of periodic relicensing. However, professional registration can be revoked if health workers do not comply with continuing medical education requirements. The ASTT (MOH) was assigned responsibility for continuing medical education (Circular No. 22/2013/TT-BYT). In addition, implicit in Circular 26 is a policy that will withdraw the professional registration of secondary midwives by 1 January 2025 if they do not upgrade their qualifications to junior college level.

***Continuing medical education***

Continuing medical education requirements and systems are being developed and linked to professional registration for all types of health workers under the Law on Examination and Treatment. Continuing medical education policies are not specific to midwives. The regulatory framework includes regulations on standards to ensure quality of units providing continuing medical education to health workers (MOH Decision 493/QD-BYT in 2012), continuing medical education certification codes for units providing continuing medical education to health workers (MOHO Decision 492/QD-BYT in 2012), MOH Circular 22/2013/TT-BYT providing overall guidance on continuing medical education for health workers, and official letter 2034/BYT-K2DT (2014) from ASTT strengthening the quality of continuing medical education for health workers. The policy lever to ensure that midwives and other health workers actually meet the new continuing medical education requirements of 48 credits every two years is the threat of revoking their practice license if requirements are not met (in Circular 22). The policy, therefore, also includes regulations on how to re-issue the licenses once the continuing medical education requirements are met, including procedures to organize and operate a council to advice on issuing and re-issuing practice certificates (MOH Decision 2803/QD-BYT), and new administrative procedures related to management of health workers, including re-issuing licenses to health workers whose licenses have been revoked (MOH Decision 3673/QD-BYT), which may occur if continuing medical education requirements are not met.

Policies on continuing medical education specific to midwives or midwifery service providers include the guideline materials on basic skills of birth attendants (MOH Decision 3982/QD-BYT in 2014). The guideline materials on skills for birth attendants was developed to serve as a guide for continuing medical education on safe motherhood and to support implementation of the overall strategy for reproductive health, especially in disadvantaged and remote areas where women are more likely to give birth at a commune level. The curriculum and training materials for care and feeding of infants and small children (MOH Decision 4063/QD-BYT in 2014) is another example of essential continuing medical education for midwives that has been implemented by the MOH. A more complete list of continuing medical education training modules is provided in Table 34 above, although not all of those programs are the result of MOH decisions; many of them are targeted to obstetricians, rather than midwives, and it is not yet clear which of those programs would be eligible for compliance with continuing medical education requirements in Circular 22/2013/TT-BYT.MCHD. The overall Reproductive Health Care Guidelines 2016 update will serve as an important guide for developing further continuing medical education content in the area of midwifery services, particularly as new technologies are introduced into the guidelines that were not taught in earlier pre-service training programs.

***Upgrading from lower to higher-level***

***qualifications*** [48]

Another important area of in-service training is the upgrading of qualifications from secondary (or elementary) to junior college, or from junior college to university and beyond. As of 2016, as Viet Nam intensifies efforts to meet regional (ASEAN) standards of health human resources, substantial attention is needed in this area. The vast majority (> 90%) of current midwives in Viet Nam, including OB-paediatric assistant doctors, have only secondary level training. According to Circular 26, by 2021 new secondary midwife graduates will no longer be recruited into state health facilities. By 2025, the existing secondary midwives in the system must have upgraded their qualifications to junior college. Those that do not may be laid off or relegated to non-midwife duties such as an orderly. The same is true for nurses and medical technicians.

The current regulations on upgrade training are under the MOET, but responsibility for junior college training has been shifted to MOLISA, so there may be some transitional delays over the next few years as the reorganization takes place. The integrated circular (combination of the Circulars 55/2012/TT-BGDDT and 08/2015/TT-BGDDT) sets out requirements for facilities to provide upgrade training, including that they have had at least 3 cohorts *(khoa)* of pre-service student enrolments prior to opening the upgrade training, and that the enrolment quota for upgrade students not exceed 15% of that applied for pre-service training students in the health sector.

As mentioned above, the category of OB-paediatric assistant doctor is not explicitly mentioned in Circular 26 in relation to the roadmap for phasing out secondary midwives. Current policy gives assistant doctors the option of upgrading their training to become a medical doctor (1915/BYT-K2ĐT). However, there is some confusion about upgrading training of OB-paediatric assistant doctors from secondary level to junior college midwife qualification.

Midwife training establishments are reluctant to recruit OB-paediatric assistant doctors into their training programs to upgrade them from secondary to junior college midwife as they believe that the current legal basis does not give them explicit authorization for this. However, the policies on upgrade training in Circular 55/2012/TT- BGDĐT and revisions to it in Circular 08/2013/TT-BYT suggest that determining the equivalent educational attainment of potential trainees is the task of a "qualifications upgrade committee" *(Hội đồng đào tạo liên thông)* at the training institution itself. This misunderstanding requires clarification by the regulatory authorities, including from MOET and ASTT (MOH).

### *3.6.7. Complaints and discipline*

Policies on complaints and discipline have been developed as part of the Law on Grievances (Law 02/2011/QH13) *(Luật khiếu nại),* which replaced previous laws put in place since 1998. In the health sector, Decree 122/2014/ND-CP regulating the scope of activities of the health inspectorate, includes stipulations that assign this unit responsibility for resolving grievances. However, actual health sector regulations on redressing grievances have not been updated since 2005 (MOH Decision 44/2005/QD-BYT). These regulations cover the health sector in general, and are not specific to midwives or midwifery services. Besides these regulations, there is a measure in place to revoke the operating license or practice certificate of healthcare facilities or practitioners who violate health sector regulations. Hotlines were put in place some years ago at all health facilities and at health sector authorities throughout the country, but we could not find regulations about their operation.

### *3.6.8. Code of conduct and ethics*

Vietnamese midwives do not have their own code of conduct or ethics. Instead, they are expected to follow the general medical codes

48 *In Vietnamese verbatim "đào tạo liên thông" hay "vừa học vừa làm"*

of ethics (MOH Decision No. 2088/BYT-QD), the code of conduct for medical workers (MOH Circular No. 07/2014/TT-BYT) and to participate in reforms of service delivery attitudes and behaviour according to the overall national plans (MOH Decision No. 2151/QD-BYT and MOH Plan No. 784/KH-BYT (2015)). Midwives are also subject to the assessment of violations and penalties for administrative violations in the field of health common to all in the medical profession (Decree 176/2013/ND-CP).

Many countries have separate codes of conduct specific to midwifery, such as Australia,[49] or as specified in the Nursing and Midwifery Act in Thailand,[50] or the code of ethics of the Philippines Board of Midwifery.[51]

### *3.6.9. General assessment of midwifery regulations in Viet Nam*

Clearly Viet Nam has a complex and comprehensive regulatory system for the health sector. Adjustments to one part of the system, however, entail a whole cascade of changes needed in the rest of the system. There remain some conflicts within Vietnamese regulations that require further adjustment and refinement to balance trade-offs between rigorous quality standards and availability and accessibility of midwife services to the population, and between the desire to reduce maternal and neonatal mortality the aim of improving the quality of care without unnecessarily escalating costs to the health insurance system and creating a financial burden on households.

Table 40 reviews the ICM criteria for assessing national midwifery regulations. It indicates that Viet Nam has fully or partially achieved many of these criteria. Certain aspects of the regulatory regime in Viet Nam do not seem to fit with the ICM criteria due to the regulatory structures in Viet Nam's health system, even though capable bodies exist to perform the functions generally for all health workers. One of the main shortcomings that come out of this assessment is the lack of midwife-specific regulations, which also makes it difficult to assess some issues, which are marked as "unclear" or "unknown" in the assessment. The lack of midwives in regulatory authority agencies and the low involvement of the VAM in policy advocacy for the midwife profession or midwifery services is also an important shortcoming, particularly in the process of developing guidelines where obstetricians dominate.

49 http://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements.aspx

50 http://www.tnc.or.th/files/2014/08/page-9830/the_professional_act_2528_2540_pdf_26494.pdf

51 http://www.imapinc.org/article/view/4

## Table 40: ICM framework for assessing Vietnamese midwifery regulations

| | Contents of midwifery framework | Status |
|---|---|---|
| 1.1 | Regulation is moving away from mixed nurse + midwife towards more midwife-specific | In progress |
| 1.2 | Regulation is at a national level | Achieved |
| 2.1 | The midwife title can only be used by those who have achieved a certain level of schooling and competencies. Other names designate those with inadequate qualifications to be a midwife (e.g. VBA) | Achieved |
| 3.1 | The regulatory authority is a government administration, which follows government procedures for nomination, selection, and appointment, and identifies roles and terms of appointment. | Achieved |
| 3.2 | The members of the regulatory authority are NOT midwives | Not achieved, no chief midwifery officer exists. |
| 3.3 | There are no provisions for lay members in the regulatory authority | Not achieved due to different regulatory structures in Viet Nam. |
| 3.4 | The governance structures of the regulatory authority are set out in the Law on Examination and Treatment and Laws on Organization of the Government | Achieved |
| 3.5 | There is no chairperson of the midwifery regulatory authority, only the head of the MSA and the Minister of Health. They are medical doctors not midwives. | Not achieved due to different regulatory structures in Viet Nam. |
| 3.6 | The regulatory authority is not funded by members of the profession because it is a government agency | Not achieved due to different regulatory structures in Viet Nam. |
| 3.7 | The regulatory authority works in collaboration with the midwifery professional association | In progress, midwife competencies policy was in collaboration with VAM. |
| 3.8 | The regulatory authority works in collaboration with other national and international regulatory authorities | Yes, it is currently working to align Vietnamese standards with ASEAN standards for health professional regulation. |
| 4.1.1 | The MSA together with the DOP and MCHD defined the scope of midwife practice that is generally consistent with the ICM definition and scope of midwife practice | Partially, Circular 26 limits the ICM defined scope of midwife practice to the small minority with university-level training, while severely limiting scope of practice for the majority of midwives. |
| 4.2.1 | A separate authority, the ASTT, sets the minimum standards for pre-registration midwifery education and standard conditions schools must meet to teach the midwifery curriculum. These standards are consistent with the ICM education standards. | Achieved, but structures diverge from the ICM model. |
| 4.2.2 | The MSA works with the ASTT to ensure that the pre-registration midwifery education programs lead to the qualification prescribed for registration | Achieved |

| | Contents of midwifery framework | Status |
|---|---|---|
| 4.2.3 | The MSA does not perform accreditation because that is the purview of a different ministry | Unclear what role the regulatory authority has in accreditation of training schools. |
| 4.2.4 | The Ministry of Education audits pre-registration midwifery education programs and educational institutions based on MOH standards | Unclear how much auditing happens. |
| 4.3.1 | The Law on Examination and Treatment set criteria for registration and licensure | Achieved, but criteria are based on diploma and duration of supervised practice rather than competency testing. |
| 4.3.2 | The MSA developed standards and processes for registration in sub-legal documents | Achieved |
| 4.3.3 | The MSA develops processes for assessing equivalence of applications from other countries for entry to register in Viet Nam | Yes, alignment with ASEAN standards. |
| 4.3.4 | Mechanisms exist for a range of registration statuses depending on diploma and work experience | Achieved |
| 4.3.5 | The MSA has a register of midwives by gathering information from the 63 provincial registers, but the data are not set up properly for a database and are not made publicly available | Not achieved |
| 4.3.6 | The MSA has procedures, but it is unclear whether they are flexible to deal with foreign practitioners who don't meet all registration requirements. | Unclear |
| 4.3.7 | The MSA does not collect information about midwives and their practice for planning or research | Not achieved |
| 4.4.1 | The regulatory authority implements a mechanism through which midwives regularly demonstrate their continuing competence to practice | Policy in place. Continuing medical education requirements of 48 credits per 2-years, or revoke practice certificate. |
| 4.4.2 | The legislation sets out separate requirements for entry to the register and or first license and relicensing on a regular basis | No relicensing required, so no separate requirements are in place. |
| 4.4.3 | A mechanism exists for regular relicensing of the midwife's practice | No, current law does not require periodic relicensing, although license revoking can occur if continuing medical education requirements not met. |
| 4.4.4 | Mechanisms exist for return to practice programmes for midwives who have been out of practice for a defined period | Unclear |
| 4.5.1 | The legislation authorises the regulatory authority to define expected standards of conduct and to define what constitutes unprofessional conduct or professional misconduct | Code of conduct is general for all health workers, no specific code for midwives. |

| | Contents of midwifery framework | Status |
|---|---|---|
| 4.5.2 | The legislation authorizes the regulatory authority to impose, review and remove penalties sanctions and conditions on practice | Achieved generally for all types of providers, but not specifically for midwives. |
| 4.5.3 | The legislation sets out the powers and processes for receipt, investigation, determination, and resolution of complaints | Unknown |
| 4.5.4 | The regulatory body has policy and processes to manage complaints in relation to competence, conduct, or health impairment in a timely manner | Unknown |
| 4.5.5 | The legislation should provide for the separation of powers between the investigation of complaints and the hearing and determining of charges of professional misconduct | Not achieved. The current inspectorate is in charge of both investigating and resolving complaints. |
| 4.5.6 | Complaints management processes are transparent and afford natural justice to all parties | Unknown |
| 4.6.1 | The regulatory authority sets the standards of conduct and ethics | Achieved generally for all types of providers, but not specifically for misconduct specific to midwives. |

*Source: Assessment following ICM. Assessment tool to inform a gap analysis process for the strengthening of midwifery regulations. Midwifery regulation assessment tool. July 9, 2012.*

# Chapter 4:
# Conclusions

While Viet Nam has made substantial progress in improving maternal and neonatal health and moving towards universal access to essential midwifery services, the findings in Chapter 3 reveal important challenges facing Viet Nam's SRMNH. The findings have provided a detailed description of the current situation and gaps in midwifery service delivery (availability, accessibility, acceptability, and quality) that indicate substantial divergence from the global Midwifery 2030 Pathway to Health.

This chapter synthesizes the evidence on gaps in the current situation compared to the vision following the four phases of the Midwifery 2030 Pathway to Health. It also assesses health system problems that require action in order to improve Viet Nam's performance towards the Midwifery 2030 vision, the SDGs on maternal and neonatal health, and universal reproductive health care.

## 4.1. Midwifery 2030 Pathway to Health in Viet Nam

### *4.1.1. Planning and preparing (pre-pregnancy)*

- In 2015, there were 16.5 million married women and 7.5 million unmarried ***women of childbearing age***, and these numbers are expected to remain constant or fall by 2030.

- ***Contraceptive services*** are widely available and contraceptive prevalence is high among both Kinh and ethnic minorities, but not among unmarried youth and adolescents. Unmet need for any contraception is measured at 6.1% among married women, but the rate higher among ethnic minority women (8.4%) than Kinh women (5.7%), and very high among youth and adolescents (30%). Rates of unmet need for modern forms of contraception are higher, as a relatively high share of women are using less effective traditional forms of contraception. Adolescent childbearing remains high among ethnic minority women. Contraceptive counselling is widely available to married women through population workers, and increasingly available to unmarried individuals through youth-friendly reproductive health services at provincial, district, and commune-level facilities. Subsidized condoms and oral contraceptives are targeted to high fertility or needy groups, while others can obtain them in the market. Reproductive health guidelines and 3-year midwifery pre-service training (junior college) and continuing medical education have strengthened the quality of family planning services over time. However, Circular 26 (valid since November 2015) no longer authorizes junior college and secondary midwives to provide clinical contraceptive services.

- ***Abortion rates*** among married women have fallen, but abortion remains prevalent among unmarried women whose contraceptive needs are not being met. Safe abortion services are widely available in public and private facilities and most abortions occur before 12 weeks of gestation. In 2016, 14.4% of abortions were performed by midwives. Quality of abortion services has been strengthened by continuing medical education courses and pre-service training for junior college midwives, but Circular 26 now prohibits secondary and junior college midwives from providing early abortion services. Medical abortion services are also not available through midwives or grassroots facilities.

- ***While voluntary counselling and testing for HIV*** is now widely available and accessible at the district level, the same is not yet true for other STIs. Nevertheless, a network of four types of service units has been established alongside national guidelines on STIs to strengthen this service. Additionally, youth friendly reproductive health service units and lab testing capacity are increasingly available to provide these services at all levels. Midwives do not play a strong role in this network during the pre-pregnancy period.

### *4.1.2. Ensuring a healthy start (pregnancy)*

- In 2015, it is estimated that there were between ***2-2.3 million pregnancies*** (depending on the data source) in Viet Nam, many ending prematurely in abortion or miscarriage.

- ***Basic antenatal care*** is widely available at the commune health stations, reproductive health centres, or hospitals in the public or private sector. Almost all Kinh women receive antenatal care, but only two-thirds of ethnic minority women do. Obstetricians are the main providers of antenatal care (89% of all

pregnancies) with midwives or nurses involved in 28% of cases. The quality of antenatal care is incomplete for many women, especially ethnic minority women, because important components are missing, such as HIV screening early in pregnancy to prevent mother-to-child transmission of HIV, syphilis screening, or blood pressure and protein in urine screening to detect pre-eclampsia. There is evidence of overprovision of ultrasound services, which may be crowding out other essential components of antenatal care, causing harm to the foetus from excessive exposure, and wasting both human resources (time spent doing USS) and money for families.

- ***Comprehensive antenatal care*** is an expected competency of midwives, learnt during pre-service training of junior college midwives and updated with national reproductive health guidelines. However, inadequate attention has been paid to continuing medical education on antenatal care and supervision to ensure comprehensiveness of care for early detection of risk factors. Instead there is too strong a focus on ultrasound exams. Geographic distance adversely affects use of antenatal care among ethnic minority women, although VBAs may be partially filling this gap if they are available, adequately trained, and supported. Many commune health stations and regional polyclinics lack antenatal care equipment sets and iron and folic acid supplements for antenatal care provision.

### *4.1.3. Supporting a safe beginning (childbirth)*

- In 2015, there were from ***1.5 to 1.7 million live births*** in Viet Nam, with this figure expected to remain relatively constant or to decline slightly by 2030.

- ***The 2030 goal for the maternal mortality ratio*** (45 deaths per 100,000 live births) in Viet Nam requires a substantial increase in effort and effectiveness. The three main causes of maternal mortality in Viet Nam are postpartum haemorrhage, sepsis, and eclampsia. High quality care should see substantial reductions in all three of these conditions resulting from early detection, preventative treatments, and early treatment.

- ***Skilled birth assistance for normal birth*** is widely available in public and private hospitals in districts throughout the country. In many commune health stations, services for assisted births are also available, and in many ethnic minority villages VBAs are available to provide assistance in home births. Most births are occurring in hospitals, with only 11% of all births in the commune health stations and 5.6% at home. Only 3.9% of births occurred in private hospitals. Nearly all Kinh women give birth in a facility with SBAs, but only two-thirds of ethnic minority women do, and assistance by VBAs is only available in about one-fifth of villages that need them.

- ***Quality of birthing assistance*** is improving, but many shortcomings remain. Continuing medical education training courses have been widely implemented to ***update basic SBA skills***. Nevertheless, in most OB facilities, lack of privacy and overcrowding, lack of birth companion/s, traditional supine position for labour and birth, restrictions on movement, food and fluids during labour, and lack of information or choice for women about interventions such as episiotomy, are all symptoms of a system prioritizing high throughput rather than respectful, evidence-based care which acknowledges women's human rights during childbirth. These practices also have adverse implications for MCH, particularly if they lead to unnecessary C-section or episiotomy.

- ***Access to effective care in a timely manner***

***for OB emergencies*** before, during, and after birth needs strengthening to achieve maternal mortality reduction goals. Maternal mortality audits are not yet fully institutionalized or effective in drawing lessons to help prevent future maternal deaths. Continuing medical education on OB emergencies has been provided to some trainers and providers, but mainly at the provincial level, and it does not seem to be focused on midwives. No evidence of regular OB emergency drills was found, to hone skills to respond quickly to these rare events by VBAs, commune health stations or hospitals, which may explain why maternal mortality audits noted that often it was delays or inadequacy of health worker response that led to deaths. In the commune health stations and regional polyclinics, equipment and medicines, particularly for OB emergency response, are not always available, for example less than 20% of commune health stations had MgSO¬4 available. Low awareness among women and their family about symptoms of OB emergencies during birth or in the postpartum period leads to delays in seeking care, especially for women experiencing home births in remote areas, but also for women prior to labour or in the postpartum period after leaving the health facility.

- The capacity to perform ***C-section surgeries*** in district hospitals has expanded rapidly, bringing this life-saving intervention closer to the women in need. However, the extremely rapid increase in performance of C-section to three times the WHO-recommended level indicates that they are being performed without proper clinical justification. Not only is this more costly, but it puts the mother at higher risk from major abdominal surgery, having a subsequent miscarriage, ectopic pregnancy or C-section with long-term implications on population health due to higher prevalence of chronic disease among the children born by C-section.

### *4.1.4. Creating a foundation for the future (postpartum/postnatal period)*

- ***The 2030 goal for neonatal mortality*** (to 5 per 1000 live births) calls for maintaining the current pace of reducing neonatal mortality by about 450 newborn deaths per year. Major causes of neonatal death include complications of preterm birth, neonatal sepsis, neural tube defects, congenital heart anomalies and birth asphyxia.

- ***Early essential newborn care*** has been a priority of the MCHD, with substantial effort made for developing guidelines (for normal delivery and C-section) and continuing medical education training. Skin-to-skin contact immediately after normal birth and C-section birth, Vitamin K1 injections, hygienic umbilical cord care, hepatitis B vaccination and encouragement of breastfeeding are widely available for healthy newborns in OB facilities. Despite these efforts, key indicators of breastfeeding (early initiation, exclusive breastfeeding, pre-lacteal feed) show low performance. Midwives play an important role in providing newborn care services for both normal deliveries and C-sections, although not all have received continuing medical education on the essential early newborn care package.

- ***Newborns with special care needs***, including underweight, preterm and sick babies have also received attention with a large investment in training and equipment for NICUs and jaundice treatment at the district level. Nevertheless, prevention of preterm births through interventions to safely prolong pregnancy to term, including after premature rupture of membranes, or prevention of hypertensive disorders during pregnancy did not receive

much attention. Neonatal resuscitation competencies are not universally available in commune level facilities and appear to be a weak point in the clinical practice training of junior college midwives.

- ***Postpartum and postnatal newborn care*** are mainly provided in the health facility where the births occur, with little reported postpartum care after discharge, despite the importance of this care for detection of late complications in mothers and newborns, for family planning counselling to space the next birth, breastfeeding support, and ensuring child vaccination. Financial incentives may be discouraging use of this care, as there are no official service prices for postpartum care after discharge from the hospital, nor are there any medicine and medical consumable lists (Circular 06/2009/TT-BYT) for these services, and costs are not reimbursable by health insurance as it consists of health checks rather than treatment.

## 4.2. Health system challenges to achieve the Midwifery 2030 vision

Some underlying factors hinder the ability of Viet Nam's health system to appropriately respond to the healthcare needs identified in this report and the Midwifery 2030 vision. Continuing in the current trend towards medicalization of midwifery services is not sustainable, nor is it in the best interests of mothers and children. Below is a synthesis of the impediments to shifting from the medical to the midwife-led model according to the health system six building blocks framework of the WHO.[52]

### *4.2.1. Governance*

Role of midwives in regulating midwives and lack of midwife-specific regulatory authority

- ***VAM*** still plays a weak role in regulating midwives. Midwives, with their unique perspectives to promote natural processes rather than medical interventions in pregnancy and childbirth, are rarely on drafting committees for guidelines or midwife-related policies, such as for scope of practice or qualifications to practice midwifery. Currently practicing midwives, in general, have only limited involvement in committees developing policies, training materials, auditing midwife performance, and assessing midwife competencies for issuing professional licenses.

- The current sub-committee on nursing and midwifery under the National Advisory Council on professional medical registration lacks the comprehensive scope of work of ***Midwifery Councils*** in other countries. The very limited scope of responsibility of this sub-committee means that most aspects of professional regulation are not specialized or distinct for midwives compared to other medical professionals under the Law on Examination and Treatment and Decision 2803/QĐ-BYT (2013) on the organization and activities of the advisory council on professional registration of the MOH. This lack of midwife specificity in the regulatory entity responsible for midwives leads to inconsistencies in policies. For example, the current scope of practice of midwives with less than university-level training does not fit with the actual needs of Viet Nam's health system, even though their competencies are often adequate or could be strengthened through continuing medical education in specific weaker areas and national reproductive health guidelines consider midwives appropriate for performing these tasks. Additionally, there is a lack of midwifery specialization in the setting of standards and accreditation of providers of midwife pre-service and continuing medical education training, setting midwife-specific ethical standards

52 *http://www.wpro.who.int/health_services/health_systems_framework/en/*

and codes of conduct to ensure respectful care, and resolving grievances and complaints among clients of midwives.

***Limited scope and restricted autonomy of midwifery practice***

- ***While Vietnamese regulations on midwives (Circular 26) now meet ASEAN requirements on scope of work and qualifications, they have strong adverse implications for development and use of midwives to meet the current needs of the Vietnamese health system.***

  - ***First,*** in November 2015 when Circular 26 came into effect, it excluded Level IV midwives (the 94% of all midwives who have secondary and junior college training) from providing essential midwifery services, such as clinical contraception, RTI/STI screening and treatment, early abortion services, etc. The overall scope of work described in Circular 26 is not aligned with current midwife training (in 2014 only 1,538 out of 35,000 midwives had university or higher-level training) or tasks considered appropriate for midwives to provide in the reproductive health guidelines. Shifting these tasks to doctors for such a high volume of services overburdens them unnecessarily, preventing them from providing more specialized services, or from performing other important health system tasks like teaching, research, and supervision. No evidence has been presented indicating major shortcomings in quality and safety of these services when provided by qualified Level IV midwives, so the current policy seems to lack an evidence base for severely limiting the Level IV midwife scope of work.

  - ***Second,*** while the scope of work of Level IV midwives has become severely restricted, at the same time Level III (bachelor's degree) and Level II (master's degree) midwives are given authority to perform those essential tasks, even though there are so few with this level of qualification. Inadequate emphasis is placed in the circular on the other tasks higher-level midwives should be doing, such as research, teaching, professional supervision, participation in the Midwifery Council to assess midwifery competencies and resolve grievances due to midwife errors, and participation in VAM to provide inputs into midwife policymaking.

  - ***Third,*** by 2025 the policy requires that secondary midwives upgrade their qualifications to junior college level or risk losing their registration to practice as a midwife. As of 2013, there were 33,000 midwives and OB-paediatric assistant doctors requiring upgrade training. By 2016 there were 21 schools offering midwife training, and if all of them were eligible to train upgrade students, the maximum intake could be 240 students per year (15% of the quota of direct-entry students, which was 1,600 in 2016). If the maximum possible upgrade training takes place, this means by 2025, less than 2,500 midwives would be able to obtain the required training to retain their registration to practice as a Level IV midwife. The remainder would have to switch to other occupations, like an orderly.

  - ***Fourth,*** there is a lack of written policy documents to guide medical schools and health facilities in how to ensure the upgrading of the qualifications of OB paediatric assistant doctors, and to clarify the scope of work of those with bachelor's-level training in nursing who specialized in OB/GYN or midwifery compared to midwives. Many broad strategic documents in the field of SRMNH services fail to mention the role of midwives and their scope of their responsibility in providing those services. There is a lack of midwife-specific standards in areas such as redress of client complaints, ethics, and codes of conduct.

### *4.2.2. Health information systems*

***Health workforce statistics***

- The current lack of a ***live national registry of midwives and other midwifery practitioners*** in Viet Nam makes it difficult to obtain up-to-date information on the number and qualifications of people currently practicing midwifery. This information is used for making plans for training, upgrade training and continuing medical education, for monitoring compliance with regulations on scope of practice and continuing medical education requirements, and so that patients can have more information about their midwife service providers. Development of a live registry of midwives is considered by ICM to be an important regulatory tool.

- Little routinely collected information was available about VBAs in Viet Nam when this study was conducted. Investments in ***VBA*** training and stipends are substantial, but little work has been done to evaluate the effectiveness of their work, client satisfaction with VBAs, or what more could be done to improve their effectiveness. In addition, for planning and budgeting purposes, it is important that more information be available about the unmet need for VBAs. Utilization of VBAs remains low due to provincial variation in their deployment.

***Information about training and quality of training***

- The MOH has little ***centralized information about training capacity, plans, actual enrolments,*** or training conditions (instructors, equipment, training materials, clinical practice sites, etc.) for monitoring the supply or quality of midwife training. The lack of competency exams upon graduation, and the low number of required competencies assessed during training also makes it difficult to objectively assess whether midwives have actually achieved competencies required. The need for monitoring training quality is high, especially as the pressure for volume increases in the next nine years to meet requirements of Circular 26. However, information on surplus capacity for providing upgrade training or continuing medical education training is also important to help in balancing the enormous demands for training over the next few years and the limited capacity to provide it.

***Information to provide feedback to improve quality***

- ***Maternal and neonatal audits*** are a crucial information tool for identifying and analysing problems in the health system and for improving preventive efforts and responses to OB or neonatal emergencies in order to reduce maternal and neonatal deaths. Yet in Viet Nam the capacity and resources for implementing these audits are inadequate. Many audits find inadequate information recorded about different cases, making it difficult to identify where the problems arose. While the purpose of the audits is lesson drawing and benchmarking, they are often used for assigning blame, which becomes counterproductive.

- Statistics on miscarriage, stillbirth, preterm birth, and other unsatisfactory pregnancy outcomes are unavailable. This makes it difficult to research causes or target interventions.

***Information about need, service provision gaps***

- ***Abortion*** is a service required mainly due to lack of contraception or contraceptive failure. This is particularly a problem among young unmarried individuals who face barriers to youth-friendly reproductive health services. Yet information is not

routinely collected by the government about the reproductive health needs and service use among young people.

- ***Private provision of midwifery services*** has been growing, but little information is known about the size of this sector or its composition. Lack of information on private sector demand for midwives, or on quality of private services makes it difficult to plan or regulate this important sector.

### *4.2.3. Health human resources*

***Deployment***

- Midwives (or OB-paediatric assistant doctors) are widely available in 98.2% of all commune health stations and in OB departments of all hospitals. However, there are still approximately 32% of ethnic minority women birthing without a SBA and trained ***VBAs are only available in 18% of disadvantaged villages*** that need them.

- Scope of midwife work responsibilities for the majority of midwives has been severely curtailed by regulations aimed at ***ASEAN integration*** (mentioned in the Governance section above).

- Little attention has been paid to ***balancing demand and supply of midwives in the labour market*** and severe imbalances exist. Out of 850 junior college midwife student quotas reported in 17 schools responding to the VMR survey, only 440 students were actually enrolled. Some schools offered midwifery training but had no enrolments, suggesting that the profession is not well known or the remuneration and working conditions are not attractive. Staff at many midwife training schools do not know what happens to their graduates, or say that many graduates still have not found midwifery jobs within one year of graduation. Most midwife jobs in the government sector are already filled by secondary midwives, and they are unlikely to be fired to recruit new more highly trained graduates. Training establishments providing junior college midwife training in 20 provinces may have information on demand for midwife graduates within their provinces, but they are unlikely to know about demand in the other 43 provinces. Little information is available on demand for midwives to work in private health facilities.

***State management and supply of midwife training***

- ***Recent reorganization of responsibilities has split management of midwife training*** among three agencies: MOH, MOET, and MOLISA. This occurs as regulatory requirements in Circular 26 have placed a massive demand on the need for upgrade training from secondary to junior college midwife degree (See the Governance section above), and basically eliminated demand for secondary midwife training. Restrictive regulations on upgrade training facilities and quotas, ostensibly to ensure quality, makes it impossible to achieve the required volume of upgrade training required in Circular 26 by 2025. Delays in establishing university-level direct-entry midwife training, and official recognition of the equivalence between university-level nurse-midwife and nurse specialized in OB/GYN, have hindered tertiary training of midwives. Cooperation is needed among these three agencies to overcome these bottlenecks.

- ***Control over midwife training supply has been devolved to localities*** who decide whether or not to offer the program and how much of their enrolment to allocate for out-of-province students. There are currently only 21 public universities or junior colleges (in 20 provinces) and no

private schools providing 3-year midwife training. No junior college midwife training is available in 43 provinces, including all five Central Highlands provinces and 13 of 15 Northern Midlands and Mountains provinces. Many medical secondary schools and junior colleges continue to offer secondary midwife training even though the labour market demand for this qualification will essentially end as of 2021 (due to Circular 26).

- ***The number of medical schools providing the competency-based 3-year and 4-year midwife curriculum is still small***, and expansion will take time, mainly due to constraints in availability of experienced university or post-graduate midwives to serve as instructors. In 2016 only six universities report providing university-level midwife training (including one starting to provide direct-entry midwife training in 2016, and five others reporting training in nursing specialized in OB/GYN or nurse-midwife). In addition, offering this program requires large investments for simulation lab equipment and materials and major efforts to organize and train clinical guides for clinical practice in health facilities.

- ***Few training institutions meet requirements to provide upgrade training*** from secondary to junior college (particularly the requirement to have enrolled at least three cohorts [khoa] of direct-entry trainees prior to being authorized to provide upgrade training). If they do offer upgrade training, the number of upgrade trainees is limited to 15% or less of the direct entry midwifery trainees at the same level. The planned quotas reported by these schools for recruiting upgrade students in training establishments is very low compared to the need.

- Some medical colleges understand that the policy on upgrade training is only for secondary midwives, and that they lack authority to provide upgrade training from OB-paediatric assistant doctor to junior college midwife. The ASTT states that the existing policy on upgrade training for midwives clearly includes OB-paediatric assistant doctors. There is a need for ***ASTT to further clarify the policy in writing to the medical schools.***

***Quality of training***

- ***The quotas and level of achievement in clinical practice for specific midwife tasks and continuity of care cases remain low*** compared with the requirements for midwife trainees to achieve true competency. This is due to several reasons, including inadequate supervised practice in labs for trainees to become competent prior to working directly with patients, and clinical guides with inadequate pedagogical training and heavy clinical workloads rendering them unable to provide adequate supervision of trainees. The period of supervised practice after graduation and prior to obtaining midwife registration lacks a clear structure and regulations to ensure that it adequately compensates for lack of clinical opportunities during training. Some junior colleges have not yet retrained their instructors and clinical guides to ensure effective implementation of competency-based training.

- ***Weaknesses exist in the midwifery instructor workforce:*** While permanent instructors in 3-year midwife training institutions all have high educational qualifications, and many have substantial experience practicing medicine or in related fields, only a small number of them have qualifications and experience working as a midwife, and few of them have medical pedagogy certificates from the MOH. This suggests substantial effort

is needed to ensure the philosophy of midwifery is conveyed and that the clinical simulations are effectively implemented in labs.

- While a national midwifery textbook has been developed following the 3-year and 4-year framework curriculum, this ***textbook is not universally used.*** Although many other training materials are likely of good quality, some training materials being used are out-of-date. The midwife training instructors face substantial language barriers and low use of the internet for accessing the latest midwifery knowledge and pedagogical methods for updating training materials. Inadequate attention is paid to instilling cultural sensitivity into the attitudes and practices of midwives during the training process and during clinical practice.

***Continuing medical education***

- ***Continuing medical education requirements are being institutionalized*** (Circular 22), with the policy lever of revoking midwifery registration if continuing medical education requirements are not achieved. Continuing medical education regulations now require that midwives receive 48 hours of continuing medical education every two years. With a public midwifery workforce of more than 35,000 people, this time requirement is equivalent to 438 full-time workers taking time off from their duties for an entire year. In terms of organization, this would require 1,400 classes of 25 students attending over three 8-hour days, not including the development of training materials and training of trainers that will be required. A large number of medical schools, medical facilities and provincial health departments and some medical associations are approved as providers of continuing medical education (Decision 492), but no comprehensive plans are in place to match up training needs and supply, particularly to strategically fill knowledge gaps in the midwife workforce. A large number of continuing medical education courses have been designed and implemented on SRMNH topics and a list of continuing medical education training facilities has been issued. Nevertheless, many aspects of the continuing medical education policy have not yet been fully implemented, such as the mechanism to ensure midwife compliance with regulations, the assessment of eligibility of continuing medical education courses for meeting requirements, and the financial responsibility to pay for required continuing medical education.

- Viet Nam has not yet set up systems for expanding the scope of practice in midwife professional registration upon certification of specific continuing medical education coursework and practice. It has also net yet used ***continuing medical education as quality criteria for certifying primary-level birthing facilities*** whose staff have met and maintain update and comprehensive continuing medical education knowledge and skills.

- ***Shortcomings in competencies of midwives reflect to a large extent the predominance of secondary midwives in the workforce.*** Their pre-service training is inadequate to ensure all skills and competencies required for providing midwife services autonomously following the Midwifery 2030 Vision. Continuing medical education programs up to the present have not been systematically organized to ensure that, despite shortcomings in pre-service training, secondary-trained midwives could achieve all the necessary competencies they need through short-term in-service training.

### *4.2.4. Health financing*

***Incentives***

- ***Health insurance*** creates incentives for users of health services. Services covered by insurance are likely to be used more than those that are not. The current health insurance package does not include screening for infections (such as STIs) or check-ups (like postpartum care after discharge from the hospital), which may contribute to low use of those services. Low and declining use of the commune health station for normal delivery services may also be due to the policy in some provinces of only authorizing health insurance to cover birthing services at hospitals, and not at the commune health stations (e.g., in Hanoi). But health service prices and use of high tech services also signal to patients that some services may be more valuable than others, even if that is not the case, such as the higher price of antenatal care with colour ultrasound compared to the price of a clinical antenatal exam providing tetanus vaccination, measuring blood pressure, testing protein levels in urine, and checking for foetal heart beat with a stethoscope.

- Health insurance and service fees also create strong incentives for providers of services. Services with a higher surplus between administratively set prices and the costs of providing services are likely to be overprovided, such as colour ultrasounds rather than black and white ones. Services that can be provided faster may also be incentivized, such as C-sections rather than prolonged normal delivery, episiotomy rather than patient waiting, or monthly ultrasound rather than monthly clinical antenatal exam. ***Services for which no prices exist, or for which no health insurance reimbursement is made, such as postnatal care or home visits, may be underprovided.***

***Financial protection***

- Ambiguity about responsibility for payment for services or components of services can lead to a higher financial burden on households. While HIV screening for PMTCT is an essential midwifery intervention, but the current policy in Viet Nam is not yet clear on whether health insurance or international donors should pay for this service, which may lead to the patient not receiving the service or having to pay a high cost for it. ***Government policies about service charges, which are the basis for health insurance reimbursement, do not explicitly list all reproductive health services that are included in the reproductive health guidelines*** or in the classification of services to be provided at facilities at different levels *[phan tuyen ky thuat]*. For example, there are no clear prices for antenatal or postpartum care packages; it is not clear how costs of episiotomy or manual removal of placenta during normal delivery will be charged, since no prices are listed for these services in Circular 37.

***Resources to pay for training of midwives, including continuing medical education***

- The regulatory requirements for ***upgrade training do not yet make explicit who has the financial responsibility to pay*** for the recurrent costs or capital costs of this education. Implicitly it has become the responsibility of health workers to pay for the costs of upgrade education, or risk losing their professional registration in 2025. Yet on the supply side, major investments in capacity are required to quickly upgrade training of about 33,000 secondary and elementary midwives. Once the upgrade is completed, however, training facilities will have excess capacity, so they may be reluctant to respond to this training need.

- While much continuing medical education in the past was paid for by externally funded projects, the large volume of continuing medical education courses that must be supplied to meet the current regulatory requirements cannot rely on these intermittent resources. ***Continuing medical education must have a regular source of funding, from either employers or midwives, or both.*** User fee regulations in Decree 85 have begun to incorporate training costs into the charges for healthcare services. But further work is needed to determine the financial regulations, such as how much to charge for courses, and how these funds can be authorized to pay for these courses.

- Currently the MCHD estimates that ***80% of disadvantaged villages have no midwifery services and lack trained VBAs.*** So far, training of VBAs has been funded through project funds, including international donors and local hospitals. However, if this program is to be scaled up to meet need, a substantial increase in funding will be required.

### *4.2.5. Pharmaceuticals and equipment*

- In 2010, ***many commune health stations and regional polyclinics were found to lack certain essential midwifery-related drugs,*** including oxytocin, iron and folic acid, Vitamin K1, and MgSO4. Similarly, many of these facilities lacked basic contraceptive materials and devices, and equipment for antenatal care (including rapid test materials for STI screening and checking on protein in urine), delivery, and newborn care. However, the 2010 assessment of availability of these items did not match scope of service provision in specific facilities with the availability of necessary inputs into service provision. If the commune health stations and regional polyclinics are intended to play a major role in providing primary care, including maternity care services, then logistics and supply management need to be strengthened.

- ***Availability of hospital-based emergency OB surgery*** and specialized neonatal care within a given catchment area is essential to reduce maternal and neonatal mortality, and to ensure healthy outcomes for mothers and babies. The current data do not adequately indicate the coverage of these emergency facilities by catchment area. Gaps in service coverage in specific catchment areas need to be prioritized for equipment investments and deployment of specialists who can handle these special needs.

### *4.2.6. Health service delivery*

***Model of care delivery for pre-pregnancy services***

- The needs for ***contraceptive counselling and service delivery, and pre-pregnancy STI/HIV screening*** and treatment are not currently met by midwives, but by parallel systems. In Viet Nam, the population worker network (mostly for married couples) and HIV/STI screening and treatment network are an ***important alternative source of pre-pregnancy reproductive health services at present.*** However, national target program funding is being phased out, which may make it difficult to maintain these services through separate networks, and there will be more pressure to integrate these services into the general health care system.

***Model for maternity care services***

- ***Antenatal care and assistance at normal birth are increasingly provided by hospitals and doctors rather than primary care facilities and midwives.*** This goes against the MOH policy orientation towards strengthening the role of primary

care and the family doctor model. It is a more costly midwifery care model prone to over-servicing through unnecessary interventions like C-section, with negative short and long-term health consequences for mothers' and babies' health.

- ***The competencies of the current midwife workforce,*** consisting primarily of secondary midwives, ***are likely to be inadequate to achieve the Midwifery 2030 vision of a midwife-led maternity care model.*** In particular, essential birth attendant skills require strengthening to ensure adequate knowledge in order to provide comprehensive antenatal care, particularly early detection of risks, and to improve preparedness to respond to OB emergencies, pre-term birth, and neonatal asphyxia.

- Midwifery care needs of ethnic minority women in remote areas require greater outreach and improved emergency transport due to remoteness, as well as greater cultural sensitivity. ***The current VBA model of care to serve these areas is appropriate to fulfil both those requirements, but at present meets less than 20% of demand.***

- While there is potential for expanding private provision of SRMNH health services to meet the needs of women who can afford to pay their higher service fees, no information was found on the size of this sector, geographic distribution, mix of services provided, human resources, or quality of care. Only 3.9% of women reported giving birth in a private facility.

***Over servicing***

- ***C-section, episiotomy, and ultrasound services in Viet Nam's health system are all being provided at higher rates than recommended by international agencies.*** Viet Nam does not currently require facilities to report their C-section rate for benchmarking against similar hospitals and facilities do not report on the indications for C-sections according to the Robson scale. Nor do Vietnamese providers report on use of ultrasounds during antenatal care, or episiotomies during deliveries, including justification for their use. This makes it difficult to make any assessments of overprovision, or undertake research on potential harm.

- ***No enforcement mechanisms, quality audit systems, overarching clinical governance frameworks, benchmarking, or supervision systems were evident*** to support implementation of clinical guidelines and to prevent both over- and under-servicing.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# Chapter 5: Recommendations

## 5.1. Goals for Viet Nam's Midwifery 2030 vision

- Maternal and neonatal mortality decline, health outcomes improve, and positive experiences of mothers and their families are enhanced through midwife-led care.
- ***Pre-pregnancy:*** All needs are met for STI/RTI detection and treatment and contraception knowledge and access to appropriate and respectful services for both married and unmarried women of all ages, including adolescents and youth. Abortion rates are reduced for all groups, and when needed can be obtained safely and respectfully.
- ***Pregnancy:*** All women receive comprehensive evidence-based antenatal care that reduces complications during pregnancy and childbirth, strengthens knowledge of women and their families about pregnancy and childbirth, and effectively deals with any complications that arise, either through midwife care or timely referral to more specialized care as needed.
- ***Childbirth:*** All women are respectfully and compassionately assisted during labour and birth by skilled midwives and other professionals as needed; their choice of birth companion and their decisions about interventions, birthing position, and traditional practices are informed and respected. Appropriate

emergency care is provided in a timely manner in case of complications.

- ***Postpartum*** care is received by all mothers to detect and reduce complications, to assist at breastfeeding, to deal with pain or other concerns immediately after birth, and to provide advice on family planning or other health concerns during the period up to 42 days after birth.
- ***Postnatal care*** is received by all newborns including resuscitation if not breathing at birth, skin-to-skin contact with mother, immediate breastfeeding, screening for any congenital problems or abnormal symptoms, and preventive interventions (like vaccinations and Vitamin K1 injections). Babies with health problems, including preterm, low weight infants, are given appropriate care to improve their chances to survive.
- ***Other reproductive health services***, including cancer screening, youth-friendly reproductive health services, care during menopause, health check-ups and care for common ailments of small children, are comprehensively and competently provided to the relevant client groups to satisfy society's needs for reproductive health services.

**Figure 62: Midwifery 2030 Vision**

| | NEEDS |
|---|---|
| **Midwives meet 85% of basic essential midwifery service needs, referring clients to doctors only when there are complications.** | • **Pre-pregnancy**<br>• **Pregnancy**<br>• **Birth**<br>• **Post-partum**<br>• **Neonatal care**<br>• **Other reproductive health needs** |
| **Doctors meet the needs of cases facing complications, and are rarely involved in basic midwifery service provision.** | |
| **Population workers, VBAs, and STI clinics complement the work of midwives through mobilization of clients to request services, or through alternative points of care.** | |

To meet these goals, tentative recommendations are proposed below in three parts. First, recommendations are made related to each of the six building blocks of the health system. Then, recommendations aimed at specific stakeholders are provided. Finally, recommendations are given for three 5-year periods. The ultimate objective is a transformation of the current system towards the Midwifery 2030 vision of comprehensive woman-centred care provided continuously by midwives, with additional support by other providers as the need arises.

The Midwifery 2030 vision is philosophically different from the medical model of maternity care. It considers pregnancy and childbearing as a natural physiological process and the role of health workers is to aid the woman to

safely experience what is necessary to bear a healthy child. Of course, when something goes wrong, the medical system comes into play with obstetricians playing a key role in dealing with OB emergencies. It is important to keep this vision in mind as one reviews the recommendations.

## 5.2 Recommendations by health system building block

### *5.2.1. Governance*

***Enhance midwife-specific regulatory authority***

- Research the functioning of midwifery councils in other countries and develop a proposal for establishing a Midwifery Council for Viet Nam that implements the professional regulations stipulated in the Law on Examination and Treatment, but specializes in the professional regulation of midwives. This should include redefining the scope of midwifery practice and the qualifications for bearing the title of midwife (Circular 26); setting a specific code of conduct and ethics of midwives to ensure respectful care; assessing competencies of midwives for purposes of professional registration; ensuring continuing medical education requirements for renewal of professional registration; determining requirements for pre-service midwife education, criteria for entry into the profession, criteria for accreditation of schools, and curricula for midwife education; and handling complaints, grievances, and redress related to midwives. For all of these functions, midwives and VAM should be actively involved. Their unique perspectives will help to reduce over medicalization of birth processes, and help to develop a more primary-care oriented continuity of care model of health service delivery.
- As the strategy for primary health care and family doctor models are developed, ensure that that the Midwifery 2030 vision is incorporated into those policies and strategies. Maternity care should be led by well-trained autonomous midwives and implemented at primary care facilities (commune health stations, regional polyclinics, private birthing centres), or in midwifery-led birthing centres attached to hospitals, with referrals to obstetrician-led care only when risk factors or complications are present.

***Revise scope of work and qualification requirements for midwives***

- Urgently review and revise provisions of Circular 26 related to Level IV (secondary and junior college) midwife qualifications and scope of work.

o First, revise the scope of work for Level IV midwives to fit with their actual job responsibilities, particularly at the grassroots level, where they are regularly involved in providing clinical contraception, abortion, youth-friendly services, RTI/STI services, and a range of other services that are not currently in their legal scope of work according to Circular 26. Synthesize information from the National Reproductive Health Care Guidelines 2016, the midwifery training curricula, and the policy assigning technical services to different levels of the health system (43/2013/TT-BYT) as a basis for designating which level midwife in which setting (commune health station versus hospital versus reproductive health centre) can provide which type of service, and which services must be provided by an obstetrician in a hospital setting. Designate which services require additional certification through continuing medical education, and include them in the midwifery scope of work as part of their professional

registration.

- ***Second,*** clarify the distinctions between Level IV, Level III, and Level II scopes of work. Note that all three levels of midwife should be able to provide essential midwifery services, while those with higher qualifications (university, master's degree) would also be involved in teaching, research, management, supervision, or have greater responsibilities on the Midwifery Council for assessing competencies of midwives and to help resolve grievances and cases of midwife error.

- ***Third,*** revise the policy eliminating secondary midwives from the Level IV midwife workforce if they do not upgrade to junior college midwife by 2025. Specifically, eliminate secondary level pre-service midwife training so all future midwife graduates will have a minimum 3-year qualification. For all secondary midwives in the workforce, offer options, including upgrade to junior college for those who can afford to do this. For the remainder, offer certifications from a series of short-term continuing medical education courses as a way to ensure that they have the essential competencies needed for their work.

- ***Fourth,*** in the policy on scope of work and qualifications, clarify the equivalence between OB-paediatric assistant doctor, nurse specialized in OB/GYN, nurse-midwife, and the various levels of midwife.

- Revise the detailed scopes of work of various levels of midwives in line with the training curriculum, reproductive health guidelines, and any requirements for additional training modules and certification, to ensure that midwives have the authority, professional responsibility, and competencies required to practice midwifery as an autonomous profession following the Midwifery 2030 vision. This would allow midwives to become the first point of contact to the health system for all pregnant women, whose normal pregnancy could be monitored and managed by competent midwives through birth and the postpartum period. The midwives could be care coordinators who identify pregnancies with special needs or complications, and make appropriate referrals as needed. This vision of Midwifery 2030 is highly consistent with the orientation towards the family doctor model and emphasis on primary health care, and midwives should be actively involved in discussions for further development of these primary health care strategies.

### *5.2.2. Health information system*

***Exploit existing professional registration information for midwifery workforce statistics***

- Exploit the existing data on health human resources in the database set up for professional registration, currently managed by the MSA. First, for governance purposes, it is essential to have a continuously updated information source on all human resources working in reproductive health that can be used for planning and policymaking for training and deployment of the workforce. Second, this database can also be used for managing compliance with policies on continuing medical education, and registration revocation in case of medical errors by midwives, thus serving as a form of consumer protection and putting indirect pressure on midwives to ensure they maintain their professional qualifications and follow national standards for care.

- Monitor and evaluate the work of VBAs in the provinces where they work to

regularly assess their contributions to increasing access and utilization of essential midwife services and to reducing maternal and neonatal mortality. Identify localities where this model of care may not be working, in order to determine alternative or supplementary solutions ensuring universal reproductive health services for underserved populations. Consider use of e-health applications to gather statistical information from VBAs, but also to provide them with advice or protocols to follow when providing services to women.

***Consolidate information on training centrally to enhance capacity to match midwife demand and supply***

- In order to have better information to use in health human resources planning, create a direct reporting system for medical universities and colleges to report to the MOH on the number of midwives trained each year, with requirements that they trace where their graduates find employment. Of particular high priority is information on the quotas and actual enrolments in upgrade training, and any impediments to expanding capacity for this urgent activity. With the high volume of trainees over the next 10 years, it is imperative that a system for monitoring quality of training be set up, and the data used to support training establishments in providing quality training to midwives.

***Increase effectiveness of data collection and analysis for taking action***

- Regularly implement maternal and neonatal mortality audits, with the participation of trained obstetricians, midwives, paediatricians, and other maternal and neonatal health service providers. Use this information to take action to strengthen preparedness, training, equipment, and medicine availability, and to increase awareness among families and mothers of symptoms of complications, and what to do about them. Collect supplementary information to identify gaps in availability of equipment, medicines, and qualified staff for providing emergency OB and neonatal services in order to resolve these shortcomings and reduce maternal and neonatal mortality.

- Increase statistical reporting on miscarriage, stillbirth, preterm birth, and other unsatisfactory pregnancy outcomes to allow research on underlying causes and identify interventions to reduce them.

- Ensure that reproductive health statistics reported by localities are not seen simply as a reporting obligation, but that the statistical system is focused on actionable information. To ensure that these figures can be used locally for decision-making, it is important that they are accurate, avoid duplication, and that provincial health authorities are adequately trained to use them.

- Develop indicators to monitor progress and adjust policies to support achievement of the 2030 Midwifery vision, including specifically: statistics on who is providing antenatal care and where, who is providing assistance at delivery, where women are giving birth, and why they are not giving birth in the commune health stations.

***Fill gaps in information about health service needs and private sector provision***

- Regularly implement surveys related to adolescents and youth, using methods tested in the Survey Assessment of Vietnamese Youth surveys in 2003 and 2009, and in other surveys about reproductive health in adolescents to obtain regular information about

reproductive health care needs of this underserved group and to evaluate the extent to which they are being met by current policies and services, particularly with regard to respectful attitudes in service provision in youth-friendly facilities.

- Make statistical reporting by private reproductive health care facilities a mandatory activity in order to obtain and keep an operating license. Develop statistical reporting forms to ensure the ability of localities to monitor their activities and their staff for research/planning purposes as well as for regulatory purposes. Of particular high interest are indicators about maternal and neonatal death, abortions, C-sections, foetal ultrasound, detection of STIs (requiring contact tracing), and human resources deployed in private facilities.

### *5.2.3. Human resources*

#### *Deployment*

- Work with line ministries to develop appropriate human resource policies on utilization of VHWs and VBAs at village levels to avoid unnecessary competition with other community workers who share the lump sum salary at the village level.

- See recommendations in the Governance section about revision of Circular 26 to overcome the regulatory-induced shortage of midwives. This includes the immediate issue related to limits on midwife provision of basic and essential midwifery services and the issues of upgrading qualifications of Level IV midwives.

- More complete information is required to allow for better planning of training to meet the demand for midwives in the health system. The MOH must take on a stronger role in planning and managing demand for midwives in the labour market and the supply of midwives from training establishments, or create policies that motivate training establishments to do this. Increase efforts to place junior college midwife graduates in public or private midwife jobs, to avoid losing these scarce, highly qualified midwives from the midwifery service network.

#### Supply of midwife training

- Improve coordination between the MOH, MOET, and MOLISA (responsible for junior college midwifery training) in order to promptly adjust policies as needed to improve quality, and most urgently, to expand the volume of upgrade training for secondary midwives to attain junior college and university-level qualifications to meet the requirements of Circular 26 and the needs of the health system. Ensure regular communication between the MOH and these two other ministries to overcome any problems that may arise during the initial transition period as MOLISA takes over responsibility for junior college midwifery training, and as this massive upgrade is undertaken.

- Provide ASTT (MOH) with direct oversight on midwifery training at local levels to ensure that provinces without training institutions providing junior college midwifery training are able to meet their midwife training needs for pre-service and upgrade training through financial arrangements with neighbouring provinces, particularly for disadvantaged provinces.

- Urgently assess the feasibility of all government and private facility plans, including at the commune health station and regional polyclinic level, for upgrading midwife staff from 2-year to 3-year qualifications, as well as the existing and planned capacity of 3-year

training establishments to fulfil this training demand over the period from now to 2025. Consider options that can extend the timeline for upgrade training (e.g., revision of Circular 26 while ensuring quality through continuing medical education) or that increase temporarily the capacity for providing upgrade training (e.g., stop intake of new pre-service midwife trainees and focus on upgrade training until 2025). Work with the relevant ministries to work through the regulatory revisions required for these adjustments.

- Prioritize upgrading the competencies of midwives working at the commune level, to enable them to work more autonomously in providing reproductive health services at the primary care level where doctors are not always available. This is crucial for achieving the 2030 Midwifery vision.

- Ensure that financial assistance is available to support investments for junior college midwifery training, particularly in disadvantaged areas and for upgrade training. Encourage health care facilities to provide financial incentives for staff to obtain upgrade training. Halt training of secondary midwives and shift resources to junior college and higher-level training.

***Quality of training***

- Provide direct oversight by the MOH (ASTT) on midwifery training at local levels to ensure the quality of training provided for midwives, particularly the simulation labs and clinical practice, as there is some evidence that not all junior colleges and universities in Viet Nam are effectively implementing competency-based training for 3-year midwives.

- Urgently facilitate upgrade training of junior college midwives to university-level midwives to provide a cadre of midwife instructors for medical junior colleges. This needs the urgent implementation of the 4-year midwifery curricula training.

- Require that midwife training institutions regularly update their training materials to ensure that they follow national treatment guidelines and integrate more effective training methods, particularly for simulation practice.

- Incorporate existing medical anthropology training materials and place greater emphasis on culturally responsive care and human rights in childbirth in medical training curricula, especially for midwives, to increase cultural sensitivity to practices surrounding contraception and childbearing, and to increase acceptability of services to women avoiding antenatal care and assistance at delivery by skilled, highly trained midwives and other practitioners.

***Continuing medical education***

- Strengthen the commune health station straining system for midwives by ensuring that relevant certified training courses are available at reasonable cost, that the system for monitoring compliance with continuing medical education requirements is in place, and that impediments to achieving continuing medical education requirements are quickly overcome to avoid midwives having their practice registration revoked. Ensure that continuing medical education is focused on strengthening fundamental midwife competencies including for antenatal care, normal birth, detection of OB complications, and essential early neonatal care. Consider accepting sufficient continuing medical education credits in lieu of requiring upgrade training to junior college midwife for experienced senior midwives to reduce the logistics difficulties of retraining

such a large number of health workers in a short time. Consider also revision of Circular 26 to allow secondary and junior college midwives with continuing medical education certification for early vacuum aspiration abortion and clinical contraceptive provision to continue to provide these services in the facilities where they work, to avoid disruption in service provision while ensuring quality. Similar to other countries, consider allowing midwives receiving additional accredited continuing medical education to receive certificates that expand their scope of practice to include the prescribing of essential OB drugs, particularly for cases of emergency and for providing essential reproductive health services such as safe abortion, or active management of the third stage of labour.

### *5.2.4. Health financing*

***Reform incentives through health insurance and service bundling***

- ***Client incentives:*** Create appropriate certification of commune health stations as birthing facilities to allow health insurance to provide reimbursement for a normal spontaneous birth package at the primary care level (commune health stations, regional polyclinics, or private birthing centres). This will contribute to reducing hospital overcrowding as well. The certification status also serves to boost trust of clients in the primary-level birthing facilities so more women will seek normal birthing services in this level of facility. Greater use of midwifery services in the community means greater opportunities for health counselling, advice, and development of a continuous trusting relationship between women and their midwife, in great contrast to the hospital setting where care is impersonal and there is no time to allow for normal birthing processes (as there are too many women giving birth for the available capacity).
- ***Provider incentives:*** Consider bundling antenatal care and delivery services into a clearly defined service package with a fixed price to reduce incentives for over-servicing with unnecessary diagnostics during pregnancy. Ensure that it is evidence-based and that clients and providers are both aware of which services are included in the package, and what criteria would be used to determine if additional services are required. Consider financial separation of ultrasound (diagnostic imaging) services from the clinical antenatal care services so clinicians do not have financial incentives to overuse ultrasound services. Provide detailed lists of inputs used in determining the package price.

***Financial protection***

- Clarify in the health insurance regulations the services that are covered in the antenatal care package. It is recommended, particularly, that screening for HIV, syphilis, and hepatitis B are covered as essential elements of antenatal care (the recommendation of WPRO). This is particularly important so that PMTCT for pregnant women with HIV infection is started as early in pregnancy as possible to suppress viral load at time of birth.
- Create a mechanism to ensure that any woman presenting for antenatal care is enabled to obtain health insurance to cover the costs of services, especially women who have been screened and found to have HIV infection. A good example of this model can be found in the Philippines PhilHealth package for all pregnant women.
- Pilot test and rigorously evaluate

alternative approaches to reduce financial and geographic barriers for ethnic minority women seeking facility-based delivery. In Viet Nam this is a relatively small set of remote localities, so feasibility and local acceptability could be assessed for establishment of a residential facility for the woman and family members to stay in during the lying in period prior to and after birth, including facilities for them to cook and perform rituals. This would substantially reduce the non-medical costs women face when seeking assistance to birth in a health facility. For women referred to hospitals, an even rarer event, funds should be mobilized through charitable organizations, such as Red Cross Society, or some other mechanism, to reduce the financial burden on the family.

***Resources for training midwives***

- Put in place financial regulations for covering recurrent and capital costs of setting up midwifery training programs for upgrading qualifications of the existing workforce, and new requirements for continuing medical education following the imposition of new regulations. Determine responsibility for payment of this training. If it is from the employer side, these costs must be recovered in user fees. If from the midwife employee side, the salary and "additional income" from facility surplus must be adequate to cover the tuition payments and room and board costs if required. Regulations on allowable fees must also be determined that are sufficient to incentivize training facilities to offer this training.

### *5.2.5. Pharmaceuticals, equipment, and infrastructure*

- Put in place measures for provincial health departments to verify routine availability of essential OB and neonatal medicines and vaccines, particularly those needed in OB emergencies or those to be administered to the newborn at birth in ***all facilities*** authorized to provide birthing services. Ensure that the equipment is sterilized and ready to be used.

- Assess the possibility of using rapid tests, test strips, and point of care testing for essential antenatal care tests such as syphilis, HIV, hepatitis B, and protein in urine during antenatal care at commune health stations. Develop protocols for their use if it is considered cost effective.

- Invest in simulation labs (and related pedagogical skills) at medical training institutions and major clinical practice sites to ensure midwife trainees are better prepared before practicing in the clinical settings. In particular, ensure that simulation equipment and training protocols are available for routine practice drills for OB and neonatal emergencies, as these events are rare and health workers may be slow to react if their skills are not constantly practiced.

- Ensure availability of essential OB drugs in commune health stations, especially drugs needed for OB emergency. Ensure folic acid supplementation during pregnancy and in preparation for pregnancy; and ensure that midwives are legally allowed to prescribe drugs that are essential for provision of antenatal and birthing care, including anticonvulsants and oxytocin.

### *5.2.6. Service delivery*

***Maintain and extend network of youth-friendly services***

- Based on results of surveys of adolescent and youth reproductive health, develop

appropriate models and adjust them as needed to provide widespread, youth-friendly services not only in medical facilities, but in schools and the workplace. Ensure that youth-friendly services have strong outreach, and not only passive service provision to those who seek services.

***Gradually introduce the midwife-led maternity care services model as conditions permit***

- ***Comprehensively strengthen the commune health stations*** to serve as a primary birthing location for uncomplicated pregnancy, and so that it can provide stabilization and transfer for OB emergency and follow-up postpartum and neonatal care. This will involve interventions in pre-service and continuing medical education training, equipment, medicines, information systems, health insurance reimbursement, networking with higher level facilities, and IEC to strengthen confidence of families in the commune health stations as a primary birthing facility.

- Formulate circulars under the Law on Examination and Treatment that facilitate the development of midwife-centred birthing centres attached to hospitals or in communities, including the arrangements needed to coordinate emergency care when client needs exceed the scope of service of the midwife-led care.

- ***Facilitate investment and regulatory compliance for private birthing homes meeting regulatory standards*** to serve as alternative to commune health stations for primary birthing location for uncomplicated pregnancy.

- Study the potential for adopting the Mother-Baby Friendly Birthing Facilities strategy in Viet Nam, including appropriate criteria, indicators, and enabling measures to improve quality of care and support respectful maternity care in the Vietnamese context. Of particular high priority should be privacy during the delivery process (curtains, or development of primary care birthing facilities with specific standards for privacy), and incorporating family members as birth companions through prenatal classes for couples and families, as well as arrangements that allow a companion to support the woman during birth and allow the woman to be able to birth in upright positions and have food and fluids in labour. An upskilling training program on the facilitation of respectful care and normal birth should be considered, including the facilitation of birthing without episiotomy.

- ***Develop a communication strategy targeting households*** and pregnant women to ensure they know which facilities are competent to provide the necessary normal pregnancy and birth services, and have emergency OB standard operating protocols in place.

- ***Strengthen cultural sensitivity*** of commune health workers through continuing medical education to make their facilities more culturally acceptable to ethnic minority women. Consider setting up facilities where women from remote villages can stay to wait for the onset of labour towards the end of their pregnancy, and where they can be supported by family members following their traditions.

***Ensure access to services for women in remote areas and for unmarried adolescents and youth***

- ***Ensure well-trained VBAs*** are in a networked system in remote areas with strengthened emergency referral, technical backup, and transport. Strengthen efforts to provide emergency transport and emergency transfers with

accompanying midwives or VBAs for women living in remote areas seeking SBA or facility birth, and especially in case of OB or neonatal emergency.

- Develop an ***unmarried adolescents and youth comprehensive reproductive health strategy*** involving multiple sectors and contact points, which is likely not led by midwives, as alternative structures already exist.

***Reduce over- and under-servicing***

- ***Monitor compliance*** of midwifery service providers with guidelines and standards, and use transparent benchmarking systems to induce compliance with reasonable practice standards, particularly for C-section, episiotomy, and ultrasound services. Use this information to enforce compliance with reproductive health guidelines to ensure not too little and not too much care.

- ***Tightly regulate*** the use of foetal ultrasound by adopting and enforcing standards such as those of the American College of Obstetricians and Gynaecologists or other international standards to minimize unnecessary and potentially harmful foetal exposure to ultrasound (See Section 3.3 above for examples of international recommendations).

- ***Require that hospitals report on reasons for C-sections*** using the Robson classification system to allow comparison of C-section prevalence across facilities. Test the use of the C-Model to calculate the optimum rate of C-sections for a given facility and compare this with actual C-section rates to aide in quality regulation of OB departments and hospitals. To reduce the C-section rate in Viet Nam would also require strategies to increase the acceptability of having a normal birth, including greater efforts at pain management and pre-labour discussion of birthing plans and options for what to do if complications arise.

- ***Retrain practitioners to change their behaviour related to episiotomy.*** Research shows that many midwives feet that it is a mandatory part of assisting at birth, and are unaware that overuse and unnecessary episiotomy is considered OB violence, or that it is a harmful and disrespectful practice.

- Provide information for women on ***the risks and benefits of foetal ultrasound, episiotomy, and C-section*** to facilitate informed choice and consumer-driven changes.

## 5.3. Stakeholders

### *5.3.1. Ministry of Health and other central ministries*

- The MOH and other central ministries should focus on integrating midwives into all reproductive health policies and strategies, resolving the existing gaps in midwife service or midwife personnel policies.

- The MOH should consider setting up a Chief Midwifery Officer either within the MSA or MCHD, and should create a Midwifery Council to serve the same purpose as the medical council in regard to professional registration of midwives.

- The MOH should also focus on revising health insurance regulations to create appropriate incentives for midwife services, and to ensure that all pregnant women have health insurance coverage that includes all essential midwifery interventions.

- The MOH should actively resolve inter-ministerial conflicts in policies that affect

midwives. Financial incentives for delivery at the commune health stations need to be revised to facilitate more primary care deliveries and reduce overcrowding in OB departments of hospitals.

- The MOH should put in place the regulatory structures for continuing medical education.

### *5.3.2. Provincial authorities*

- Provincial authorities should provide financial support or other measures to facilitate all 2-year midwives to upgrade to 3-year midwife qualifications so they can continue working in the health system.
- Provinces without junior college or university training establishments should coordinate with neighbouring provinces to ensure an adequate supply of appropriately qualified midwives to serve the province.
- Provinces should also facilitate employment seeking by newly graduated midwives through announcements of vacancies in public facilities.
- Provinces with medical training establishments that provide midwife training should support efforts of these schools to meet the requirements for midwifery training establishments, especially in relation to practical training facilities and facilitating midwives to become trainers (through obtaining higher educational qualifications) who can replace the current OB doctor trainers.
- Provinces should also ensure the local population is aware of where to seek reproductive health services to meet their needs, including unmarried adolescents, youth, ethnic minority and elderly clients.
- Provinces should fully implement national policies in localities using local budgets, especially polices relating to midwifery human resources, VBAs, VHWs, and population workers.

### *5.3.3. Health service providers (facilities)*

- Health service providers in their service delivery role need to actively implement the MOH policy on changing service attitudes. The newly graduated 3-year midwives are being trained in appropriate respectful care models, and can greatly contribute to this transformation. But facilities may need to invest in short-term measures like curtains, or longer-term birthing centres outside the OB ward of the hospital that ensure the physical conditions for respectful care. Reducing overcrowding is essential to achieving respectful care.
- Health service providers also need to ensure that their staff obtain appropriate upgrade training and continuing medical education to comply with government regulations.
- Health service providers will need to put in place appropriate care pathways (qui trinh chuyen mon) to avoid over- or under-servicing clients and to demonstrate compliance with reproductive health and OB professional guidelines and standards.
- Health providers must also comply with statistical reporting requirements that help with governance and quality improvement.

### *5.3.4. Practitioners (individuals)*

- Practitioners need to obtain the appropriate qualifications to perform the tasks they are authorized and required to do. They need to maintain and

update their knowledge through regular continuing medical education.

### *5.3.5. Training establishments*

- Training establishments should strive to meet training facility conditions for training in 3-year midwife program. They should request exemptions with appropriate justification if some conditions are not attainable, and with a clear plan to achieve them at some later date. There is a significant lack of instructors who are midwives with higher education qualifications.
- As soon as regulations allow, training establishments should open upgrade training programs to retrain 2-year to 3-year midwife qualifications.
- Training establishments should coordinate closely with medical facilities used as practice sites, to ensure that midwives are being properly guided, and that the facilities are following respectful care models to serve as role models for the midwife trainees.

### *5.3.6. Viet Nam Association of Midwives (VAM)*

- VAM should be more actively involved in policy formulation, guideline formulation, and curriculum reforms, as well as in protecting the interests of clients and midwives.
- VAM should coordinate with the MOH and localities to coordinate continuing medical education through approved continuing medical education training institutions to ensure uniformity of quality of midwife service provision throughout the country, with appropriate emphasis on local needs.
- VAM should serve an important role to represent the valid interests of midwives, such as on the issue of authority to perform core midwifery services, but the association should also champion the interests of clients, and advocate for client safety, and respectful and effective care provided by midwives.

### *5.3.7. Community and clients*

- Clients, including pre-pregnant and pregnant or postpartum women, have significant need for increasing knowledge and awareness about reproductive health and about what they should expect from reproductive health care providers. IEC campaigns and widespread dissemination of national standards and guidelines will play an important role for this group. In particular, clients should be educated about the values of the midwifery continuum of care for their health and their newborns, and learn why they should avoid overused services that can harm their long-term health outcomes. Consumer protection groups could be mobilized in this effort.
- Clients also need to be educated about good health-seeking behaviour relating to midwifery care to avoid preventable complications.

## 5.4. National Roadmap towards the Midwifery 2030 vision

The Midwifery roadmap to the year 2030 can be divided into three periods of 5-years each, including requirements for monitoring indicators and evaluation. The section below gives a notional vision of these three phases.

In the ***first period*** (2016-2020), the emphasis is on revising Circular 26 to delay the phasing out of secondary midwives to allow adequate time for upgrade training, and on expanding the scope of services that Level IV midwives can

provide. At the same time, efforts are needed to focus training on upgrading secondary to junior college midwives and expanding the number of people obtaining a bachelor's in midwifery to increase training, research, and regulatory capacity. Emphasis should be placed on continuing medical education certifications to ensure that quality of care for key midwifery skills and competencies are continuously improved. At the same time, the groundwork needs to be set for developing, piloting, and evaluating a model of quality-certified primary care birthing centres, using evidence-based standards, to be set up in the community (as part of the family medicine model), in private facilities, and/or to be linked to OB hospitals or hospitals with OB departments. This should include the development of normal spontaneous birth packages that serve the purpose of determining a fixed price for the bundle of services, but also to help the mothers and families to know what is evidence-based essential antenatal care and birthing care and what harm can result from unnecessary over-use of services. Substantial efforts need to be made to educate families about what is normal birth, what interventions are necessary and when, and what are unnecessary and potentially harmful interventions. Continuing medical education should focus on training competencies required to meet birthing centre certification standards, such as strengthening comprehensive antenatal care, normal delivery and detection of risk factors/complications, and postpartum/postnatal newborn care. The population worker model may continue but integration of family planning counselling with VHW and VBA services might be more cost-effective. Clinical contraception and early abortion services at the grassroots level will need to be reinstated as part of the scope of secondary and junior college midwives. If there are quality concerns, a policy requiring short-term continuing medical education training and certification of skills could be implemented that would allow secondary or junior college midwives to have an expanded scope of practice covering those services despite restrictions in Circular 26. Stand-alone STI/HIV counselling and screening will begin to be phased out as resources from PEPFAR and the Global Fund dry up; this counselling and screening needs to be better integrated into general health care.

During the ***second phase*** (2021-2025) upgrade training will continue, and the primary care birthing packages should be rolled out by health insurance and commune health stations, private birthing facilities, and hospitals. It is crucial that during this time the referral networks are firmly in place for emergency referrals, and that hospitals appreciate that their role is focused on dealing with complications, rather than normal childbirth. Natural birthing centres belonging to hospitals, staffed mainly by midwives, should be set up to reduce the overcrowding of OB departments in hospitals, allowing them to better perform their work on complicated cases, while the birthing facilities can operate with a focus on normal childbirth, allowing women more time and comfort for the natural process to unfold. This model will require an increase in the number of midwives compared to the number of obstetricians. STI/HIV testing will become an integrated part of maternity care provided by midwives, and rapid tests will become widely used at the primary care level for initial screening of HIV, syphilis, and hepatitis B, as well as proteinuria.

During the latter phase, from 2025-2030, the primary care birthing model should become firmly entrenched through financial incentives, organizational reforms, continuing medical education, and client preferences.

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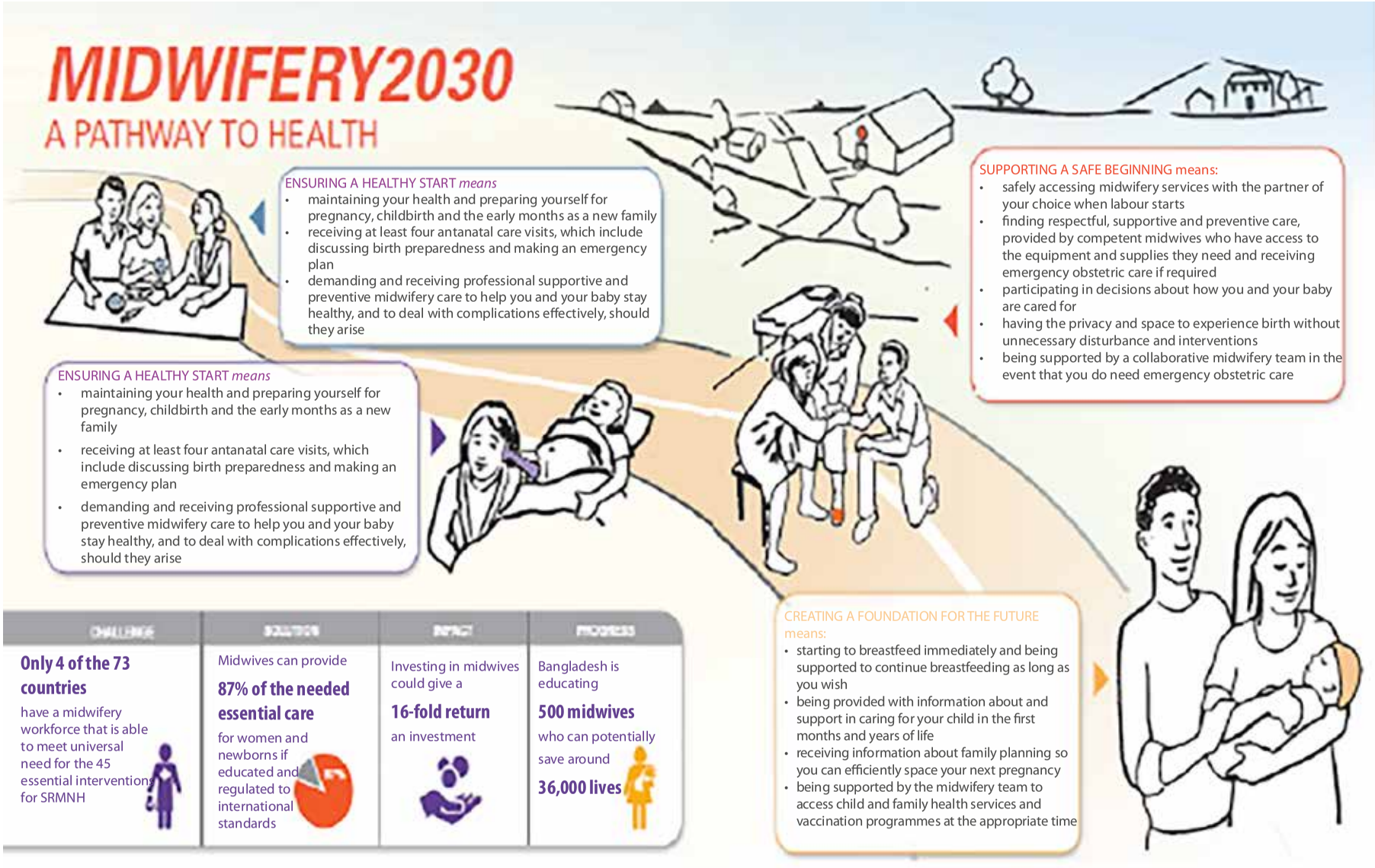
# Annex 1:

## MIDWIFERY 2030 PATHWAY TO HEALTH - VISION OF MIDWIFE-LED SERVICE PROVISION


MIDWIFERY2030
A PATHWAY TO HEALTH
ENSURING A HEALTHY START means
• maintaining your health and preparing yourself for pregnancy, childbirth and the early months as a new family
• receiving at least four antanatal care visits, which include discussing birth preparedness and making an emergency plan
• demanding and receiving professional supportive and preventive midwifery care to help you and your baby stay healthy, and to deal with complications effectively, should they arise
SUPPORTING A SAFE BEGINNING means:
• safely accessing midwifery services with the partner of your choice when labour starts
• finding respectful, supportive and preventive care, provided by competent midwives who have access to the equipment and supplies they need and receiving emergency obstetric care if required
• participating in decisions about how you and your baby are cared for
• having the privacy and space to experience birth without unnecessary disturbance and interventions
• being supported by a collaborative midwifery team in the event that you do need emergency obstetric care
ENSURING A HEALTHY START means
• maintaining your health and preparing yourself for pregnancy, childbirth and the early months as a new family
• receiving at least four antanatal care visits, which include discussing birth preparedness and making an emergency plan
• demanding and receiving professional supportive and preventive midwifery care to help you and your baby stay healthy, and to deal with complications effectively, should they arise
CHALLENGE
Only 4 of the 73 countries
have a midwifery workforce that is able to meet universal need for the 45 essential interventions for SRMNH
SOLUTION
Midwives can provide
87% of the needed essential care
for women and newborns if educated and regulated to international standards
IMPACT
Investing in midwives could give a
16-fold return
an investment
PROGRESS
Bangladesh is educating
500 midwives
who can potentially save around
36,000 lives
CREATING A FOUNDATION FOR THE FUTURE means:
• starting to breastfeed immediately and being supported to continue breastfeeding as long as you wish
• being provided with information about and support in caring for your child in the first months and years of life
• receiving information about family planning so you can efficiently space your next pregnancy
• being supported by the midwifery team to access child and family health services and vaccination programmes at the appropriate time

# ANNEX 2: STAKEHOLDERS CONSULTED FOR THIS REPORT

## Advisory group who provide comments for development of report

**Ministry of Health**

- Department of Planning and Finance

  - Phan Le Thu Hang, Deputy Director Department of Planning and Finance
  - Tham Chi Dung, expert
  - Dinh Hoai Nam, expert
  - Vu Thi Bich Ngoc, expert

- Administration of Science, Technology and Training

  - Nguyen Minh Loi, Deputy General Director
  - Nguyen Van Cuong, expert
  - Pham Ngoc Bang, expert

- Maternal and Child Health Department

  - Nguyen Duc Vinh, Director;
  - Dinh Anh Tuan, Deputy Director;
  - Nghiem Thi Xuan Hanh, expert;
  - Hoang Anh Tuan, expert;
  - Tran Thi Minh Huong, expert;

- Department of Organization and Personnel

  - Nguyen Tuan Hung, Deputy Director;
  - Duong Tien Thanh, expert;

- Medical Service Administration

  - Nguyen Trong Khoa, Deputy General Director
  - Hoang Van Thanh, expert;
  - Nguyen Hong Nhung, expert;

- General Office of Population and Family Planning

  - Dinh Huy Duong, Director, IEC department
  - Nguyen Viet Ha, Deputy Director, Personnel and Organization department

-Phan Thi Kim Thuy, midwifery expert

**UNFPA:**

- Duong Van Dat, Programme Specialist;
- Le Thi Thanh Huyen, Programme Analyst
- Phan Thi Le Mai, Programme Specialist
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**List of agencies and people provided information and participated in interviews/ discussion**

**MOH**

- Department of Planning and Finance (Vu Thi Tuoi, Vu Thi Hau, Nguyen Thi Hue)
- General Office of Population and Family Planning (Dinh Huy Dương, Lan, Ha, Hong, others)
- Administration of Science, Technology and Training (Loi, Cuong)
- Medical Services Administration

(Dr. Khoa, Vice Director; Nhung, Chief Nurse and dietitician; Quynh Anh, nursing and infection control; Nguyệt, professional registration)

- Department of Organization and Personnel (Dr Hung, Deputy Director, DOP; Hoang, staff of DOP)
- Department of Maternal and Child Health (Dr. Vinh; Dinh Anh Tuan; Hanh; Midwife Huong)

**Health settings:**

- Son Dong Commune Health Station (Dr. Do Thi Tuyet Nhung (Head of CHC); Hoang Thi Lien (Obstetric Pediatric Assisstant doctor and Vice Head)
- Son Tay Hospital (Dr. Quang, Deputy Director; Dr. Van, Chief of obstetrics department; Kim Luan, Head Nurse of obstetrics department; Thang, head of nursing department; head midwife attended but unsure of name)
- Dan Phuong Hospital (doctors, midwives, students)
- Hanoi Obstetrics Hospital (doctor in charge of international cooperation; lawyer; students)
- An Thịnh Private Obstetrics Hospital (Dr. Thư; Mrs. Hảo, chief midwife)
- Client of public maternity services (Đào Thị Huế)

**Training institutions:**

- Ha Noi Medical College (Pho Hieu Truong; Dr. Phuong, Dr. Phong, TS Huong, Chuyen (Training unit) and four students)
- Nam Dinh Nursing University (Mr. Hoang, discussion by phone)
- University of Sydney (Margaret Martin)

**UN/EU/WB/NGOs**

- Dr. Tran Hung Minh, CCIHP
- Dr. Nguyen Thi Hoai Đuc, RAFH [OB/GYN]
- Pham Thi Huong, CHD
- HealthBridge Foundation
- Vu Cong Nguyen, PHAD
- Du, UNICEF
- Bang, WHO
- Hang and Thang, MSI
- Le Ngoc Bao, CCRD
- Thuy, Concept Foundation
- Le Minh Sang, World Bank
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**UNFPA:**

- Astrid Bant, Representative
- Ritsu Nacken, Deputy Representative
- Duong Van Dat, Le Thi Thanh Huyen, Phan Thi Le Mai: SRH/HIV team
- Interpreters: Nguyet Anh, Lan Phuong, Hoang Linh
- Translators: Thanh Ha, Hoang Duong

# ANNEX 3: ASSUMPTIONS FOR ESTIMATION OF NEED FOR 46 ESSENTIAL MIDWIFERY SERVICES, 2015

## A. Pre-pregnancy

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| 1 | Family planning advice | 20 minutes counselling by midwife or population worker [may be done as a group for less time per person] Assume 50% done by population worker and 50% by midwives. | Assume 50% performed by midwives in commune health stations or other facilities, 50% by population workers. | All WRA, one contact per year | 24,008,039 | Survey of Population Change and Family Planning | |
| 2 | Family planning methods-delivery | | | | | | Method mix |
| | Condoms | 3x5 mins resupply visits (assumes some already distributed at annual counselling session). Assume 25% of condoms distributed by FP workers and rest from pharmacies, social marketing programs, etc.; staff not included in estimate here. | Assumes no role of midwives. 25% of condom need met by population workers, rest in the market. | Need for condoms (y) = WRA (y) x (CPR + unmet need) x condom method mix. | 2.710.455 | MICS 2014 (includes female condom) | 13,80% |
| | Pills | 5 min physical exam by midwife + 3x5 min resupply visits, of which 25% are distributed by FP workers. | Assumes all exams performed by midwives, no need for doctor prescription, and 25% of pill need met by FP volunteers. Rest purchased in the market. | Need for pills (y) = WRA (y) x (CPR + unmet need) x method mix (pills) | 2,337,276 | MICS 2014 | 11.90% |
| | Injectables | 4x5 mins for injections. Injections done by midwives. Assume that this includes a physical exam. | Assumes all work performed by midwives (if allowed to prescribe contraceptive injections). | Need for injectables (y) = WRA (y) x (CPR + unmet need) x method mix (injectables) | 333,897 | MICS 2014 | 1.70% |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| | IUD | 15 mins insertion +1x10min follow up visit + 1x 10min removal (assumes all done by midwives) | Assumes all work performed by midwives (assumes no prescription required and exam can be performed by midwife) | Need for IUD = [WRA (y) x (CPR + unmet need) x IUD method mix] / 5. | 1,107,751 | MICS 2014 | 28.20% |
| | Female sterilization | Additional 10 mins of counselling + 30 min assistance during procedure +10 mins follow-up + 30 min OB surgeon time. | Assumes midwife only has counselling role, procedure and assistance at procedure by OB and nurse. | Reported cases [not: Need for female sterilization (y) = [WRA (y) – WRA (y-1)] x (CPR + unmet need) x sterilization method mix.] | 8,685 | MCH statistical report | 2.80% |
| 3 | Prevention and management of STIs and HIV in all WRA | | | | | | |
| a1 | Prevention of HIV through voluntary counselling and testing (VTC) of non-pregnant women | Assumes 30 minutes of doctor time for counselling pre and post-test and 15 minutes of lab time for the test. | Voluntary testing given at VTC centers of VAAC network. | non-pregnant WRA at risk seeking HIV testing. | 376,143 | VAAC 2015 reported testing of 752,286 men and women, not including pregnant women. Assumes that about half are women, then this gives a coverage rate of 2% for non-pregnant women. | |
| a2 | Prevention of STI as part of gynecological exams | Assumes 10 minutes each for STI clinical screening (100% of cases), 10 minutes for lab test (20% of cases), assumes 75% of need met. | 75% of need assumed met, 25% no exams. Gynecological care visits in public facilities cover half of WRA (MCH statistics Form 5/BMTE-V.) If we assume that another 25% get care from private doctors that gives 75% coverage. Doctors perform screening. Lab tech does screening test. | All WRA, one contact per year | 24,008,039 | Survey of Population Change and Family Planning 2015 | |
| b | Management of STIs (non-pregnant women) | | | | | | Rate used in estimates: |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| | Syphilis *(giang mai)* | 5 mins to administer treatment and follow-up | Assumes services provided by the 4 types of facilities providing STI care. Drugs administered by midwife or nurse. Assumes then that 25% in each type of facility, and that commune health station and reproductive health center provider is 50% nurse, 50% midwife, so overall 0.5 midwife * (0.25+0.25) commune health station+reproductive health center=0.25 midwife. | WRA(y)* incidence of syphilis [non-pregnant women] | 264,088 | Go, et al. 2002 [1 to 1.2%] | 1.10% |
| | Gonorrhea *(lậu)* | 5 mins to administer treatment and follow-up | Assumes services provided by the 4 types of facilities providing STI care. Drugs administered by midwife or nurse. Assumes then that 25% in each type of facility, and that commune health station and reproductive health center provider is 50% nurse, 50% midwife, so overall 0.5 midwife * (0.25+0.25) commune health station+RH center=0.25 midwife. | Not: WRA(y)* incidence of gonorrhea [non-pregnant women] | 192,064 | Lan, et al. 2008 [0.7%];Go, et al. 2002 [0 to 1.6%] | 0.80% |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| | Chlamydia | 5 mins to administer treatment and follow-up | Assumes services provided by the 4 types of facilities providing STI care. Drugs administered by midwife or nurse. Assumes then that 25% in each type of facility, and that commune health station and reproductive health center provider is 50% nurse, 50% midwife, so overall 0.5 midwife * (0.25+0.25) commune health station+RH center=0.25 midwife. | WRA(y)* incidence of chlamydia [non-pregnant women] | 576,193 | Lan et al. 2008 [4.3%];Go, et al. 2002 [0.5% to 2.6%] | 2.40% |
| | Trichomoniasis | 5 mins to administer treatment and follow-up | Assumes services provided by the 4 types of facilities providing STI care. Drugs administered by midwife or nurse. Assumes then that 25% in each type of facility, and that commune health station and reproductive health center provider is 50% nurse, 50% midwife, so overall 0.5 midwife * (0.25+0.25) commune health station+RH center=0.25 midwife. | WRA(y)* incidence of trichomoniasis [non-pregnant women] | 888,297 | Lan et al. 2008 [1%];Go, et al. 2002 [1.6 to 5.8%] | 3.70% |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| c | Management of HIV | 11.5 OP visits (10 mins doctor each visit) and 1.56 IP days (10 mins doctor time, 20 mins nurse time per day) plus in 2 outpatient visits lab tests performed (15 mins lab technician time) per year. | Assumes all ARV services provided by HIV centers, except inpatient care at hospital. But known that drugs could also now be provided by 3 other types of providers. | All WRA needing ART, calculated as follows: No. of WRA needing ARV in 2015/ WRA in 2015 x WRA(y) | 29,266 | 55,218 is est. HIV prevalence among female aged 15-49 | 53% is % of adults aged 15+ with HIV who need ART |
| 4 | Folic acid fortification/ supplementation (in WRA with anemia>20%) | 5 mins x 2 times if anemia >20% in WRA | | All WRA, one contact per year (if anemia rate >=20%) | - | [OneHealth recommends only for countries with anemia >20% of WRA.] | Viet Nam has 2mg/ kg folic acid fortification in flour. |

*ART: antiretroviral therapy; ARV: antiretroviral; FP=family planning worker; MCH=maternal and child health; MICS= Multi-Indicator Cluster Survey; RH=reproductive health: SoWMy=State of the World's Midwifery (report); STI=sexually transmitted infection; VAAC: Viet Nam Administration of HIV/AIDS Control; WRA=women of reproductive age;*

## B. Pregnancy care

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| | Basic antenatal care | 10 mins x 4 visits per pregnancy (the other interventions are in addition to this time). | Assumes 80% performed by midwives, 20% by obstetricians on cases with known risk factors that may require C-section. | All pregnant women | 2,014,135 | | |
| 5 | Iron and folic acid supplementation (4 antenatal care visits) | 2 mins x 4 visits per pregnancy (in addition to basic visit). | Midwife distributes or advises mother to use folic acid supplements. | All pregnant women, one contact per year | 2,014,135 | | |
| 6 | Tetanus vaccination | 2.5 mins x 2 visits per pregnancy (in addition to basic antenatal care). | Administered by midwife (assumes no doctor prescription). | All pregnant women, one contact per year | 2,014,135 | | |
| 7 | Prevention and management of malaria with insecticide-treated nets and antimalarials | | | | | | |
| a | Prevention | 2 mins in 1 visit to advise on use of bednet and distribute bednet. | Midwife can provide at commune health stations. | All pregnant women living in areas of high malaria transmission. pregnant women (y)x% population in the country living in areas of high malaria transmission. | 140,989 | World Malaria Report 2015 | 7% of the population |
| b | Management | 10-15 mins diagnosis and treatment per case | Assume doctor performs this as prescription is needed. | All pregnant women with presumed and confirmed malaria; pregnant women*incidence of presumed and confirmed malaria cases. | 608 | World Malaria Report 2015 | 20000 to 27000 estimated cases |
| 8 | Prevention and management of STIs (as part of antenatal care) | | | | | | |
| a1 | IEC about HIV to pregnant women. | No information about time, not used in estimation | | Reports on number of women receiving IEC | 1,000,000 | VAAC 2015 | |
| a2 | Prevention of STIs and STI screening (except syphilis) during pregnancy, HIV screening during pregnancy | 5 mins for counselling and taking blood sample for HIV testing. 10 minutes for lab test implementation. 5 mins for clinical screening for STIs. | Midwife provides counselling and takes blood sample. Doctor performs STI clinical screening (assume 25% of cases). Lab tests performed by hospital lab or specialist STI/HIV lab. | All pregnant women, one contact per year | 2,014,135 | | |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| b | Management of STIs | | | | | | Rates used: |
| | Gonorrhea (lậu) | 5 mins follow-up (assume this includes injection) | Provided by midwife during antenatal care | pregnant women (y)* incidence of gonorrhea | 16,113 | Lan, et al. 2008 [0.7%]; Go, et al. 2002 [0 to 1.6%] | 0.80% |
| | Chlamydia | 5 mins follow-up (assume this includes injection) | Provided by midwife during antenatal care | pregnant women (y)* incidence of chlamydia | 48,339 | Lan et al. 2008 [4.3%]; Go, et al. 2002 [0.5% to 2.6%] | 2.40% |
| | Trichomoniasis | 5 mins follow-up (assume this includes injection) | Provided by midwife during antenatal care | Pregnant women (y)* incidence of trichomoniasis | 74,523 | Lan et al. 2008 [1%]; Go, et al. 2002 [1.6 to 5.8%] | 3.70% |
| c | Management of HIV (during pregnancy) | 60 mins for ARV therapy per year, 2x15 mins lab test per year | Provided at HIV treatment center | All pregnant women needing ARV to avoid mother-to-child transmission. Use reported data on PMTCT | 1,691 | 888 reported in MCH report 2015; 1,691 reported by VAAC 2015. | |
| 9 | Calcium supplementation to prevent hypertension | 2 mins x 4 times advising on benefits | Midwife | All pregnant women, one contact per year | 2,014,135 | | |
| 10 | Interventions for cessation of smoking | 1 min x 4 antenatal visits to ask about smoking, second-hand smoke and advise to quit or avoid smoke | Midwives | All pregnant women who smoke, calculated as pregnant women*prevalence of smoking in women aged over 15 years | 28,198 | GATS 2010 | 1.4%, |
| 11 | Screening for and treatment of syphilis | | | | | | |
| a | Screening for syphilis (rapid plasma reagent test) | Blood sample taken same time as sample for HIV screening. Assume 10 mins for testing. In reality only 7% of pregnancies tested for syphilis in public hospitals. | | All pregnant women, one contact per year | 2,014,135 | 176,613 | 9% |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| b | Treatment of syphilis | 5 mins for prescription +\5 mins for injection + 5 mins for follow-up | | All pregnant women with syphilis=PW*incidence of syphilis | 22,155 | Go, et al. 2002 | 1.10% |
| 12 | Antihypertensive drugs to treat high blood pressure (including low-dose aspirin to prevent pre-eclampsia) | For women diagnosed with hypertension at first antenatal care visit. 5 minutes for blood pressure monitoring and urine test (dipstick) during antenatal x 5 visits. 5 mins for doctor consultation and prescription. | Midwife can monitor, but may need doctor to prescribe. | All pregnant women with raised blood pressure. | 6,445 | Abalos, et al. 2013 | 0.32% |
| 13 | Antihypertensive drugs to treat pre-eclampsia (including low-dose aspirin to prevent pre-eclampsia) | For women with pre-eclampsia. 5 minutes for BP monitoring and urine test (dipstick) during antenatal care x 5 weeks (from diagnosis to expedition of delivery). 5 mins for doctor consultation and prescription. | Midwife can monitor, but may need doctor to prescribe. | All pregnant women with pre-eclampsia | 48,943 | Abalos, et al. 2013 | 2.43% |
| 14 | MgSO¬4 for eclampsia (including hospital services for eclampsia treatment) | 30 minutes to administer emergency anti-convulsant in any setting, 6 hours intensive monitoring and prep for birth, of which 15 minutes is obstetric time. Not including time for C-section. | Obstetric examination and prescription of follow-up treatment plan 15 minutes during first inpatient day. Rest of care by midwives. Post-birth eclampsia care, see below. | All pregnant women with eclampsia and pre-eclampsia. Live births x incidence of eclampsia + incidence of pre-eclampsia | 51,763 | Abalos et al. 2013 [pre-eclampsia is 2.43% & eclampsia is 0.14% of WPRO average] | 2.57% |
| 15 | Antibiotics for pre-term premature rupture of membranes (pPROM) | 15 min per day x 2 inpatient days before delivery | Obstetricians 5 mins for script, midwife 10 mins for administration | All births including stillbirths x incidence of pPROM | 42,298 | Goldenberg et al. 2008 | 25% of preterm births |
| 16 | Corticosteroids to prevent respiratory distress | 30 mins obstetric time to confirm diagnosis and prescribe treatment, midwife 15 mins a day x 2 days to administer. | | All births including stillbirths x preterm birth rate | 169,192 | Nguyen et al, 2004 | 11.80% |
| 17 | Safe abortion | | | | | | |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| | VAC | VAC 30 mins. | Assume 97% are vacuum aspiration abortions of which 77% are< 8 weeks. Assume 75% performed by midwife, 25% by doctor with midwife assisting. | Used reported abortions | 266,857 | MCH annual statistics | |
| | Medical | Medical abortion 2x10 mins of which is 5 mins for doctor prescription. Unsure what % of abortions are medical. They are not allowed at the commune health stations, only at district hospital and higher. | | Used reported abortions | | | |
| | D&C | D&C 30 mins | 3% of all abortions (% of late abortions). Assume performed by doctor. | Used reported abortions | 266,857 | | |
| 18 | Post-abortion care(for unsafe abortions) | Assumes 20% of unsafe abortions have complications requiring hospitalization; assumes 50% have lacerations requiring repair, 30 mins of OB time, 90 mins of midwife time, 90 minutes of hospital attendant time. | Doctor treatment of complications of unsafe abortion | WRA*rate of unsafe abortions | No recent estimates for Viet Nam | Sedgh et al. 2012 | 61% regionally (seems too high). |
| 19 | Reduce malpresentation at birth with external cephalic version | 60 mins | Unclear if this is performed in Viet Nam | All births including stillbirths x incidence of breech births including stillbirths | 64,522 | Hickock, 1992 [4-5%] | 4.50% |
| 20 | Induction of labour to manage pre-labour rupture of membranes at term | 20 mins for assessment by OB, 40 minutes to administer misoproptol and monitor (in addition to labour time in next section) | Doctor assessment and prescribe, midwife monitor and administer | All births including stillbirths x incidence of pPROM | 42,298 | | 25% of preterm births |

*ART=antiretroviral therapy; ARV: antiretroviral; D&C= Dilation and curettage ; IEC=Information, education and communication; MCH=maternal and child health; PMTCT=Prevention of mother-to-child transmission (of HIV); RH=reproductive health: SoWMy=State of the World's Midwifery (report); STI=sexually transmitted infection; VAAC=Viet Nam Administration of HIV/AIDS Control; VAC=vacuum aspiration (abortion); WPRO=Western Pacific Regional Office (WHO); WRA=women of reproductive age*

## C. Childbirth

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| | Continuing care for eclampsia after birth | 3 hours monitoring and care on days 2 to 7 of hospitalization over and above the care that would be given post-op for C-section cases. Assumes doctor takes 5 mins to monitor care each day. | Assumes 80% are planned normal births. | All pregnant women with eclampsia and pre-eclampsia. Live births x incidence of eclampsia + incidence of pre-eclampsia | 51,763 | Abalos et al. 2013 [pre-eclampsia is 2.43% & eclampsia is 0.14% of WPRO average] | 2.57% |
| 23 | Normal labour and delivery management and social support during childbirth | 6 hours midwife and 30 minutes OB. May assume in early labour that midwife serves more than one mother, and that not all women present at onset of labour, but in the middle of labour. | Assumes 80% are planned normal birth. Another 10% are planned normal but emergency C-section, but still include labour time here. | All births (including stillbirths), one contact | 1,433,827 | | |
| 21+ 22+ 24 | Active management of 3rd stage of labour to deliver placenta to prevent post-partum hemorrhage (including uterine massage, uterotonics and cord traction) | 2 hours. Midwife time on top of normal delivery. [original model indicated 2 minutes only for injection of oxytocin, but should consider the whole continuous process could take 2 hours] | Assumes 80% are planned normal birth. | All births (including stillbirths), one contact | 1,433,827 | | |
| 26a | Screen and manage HIV during childbirth-screen if not already tested | Lab test 10 minutes, | Lab technician | All births including stillbirths x (1-% of cases with 4 antenatal care visits) | 969.267 | MICS 2014 antenatal testing of HIV | 32% |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| 26b | Screen and manage HIV during childbirth-treat | Assume 20 minutes counselling to positive mothers about what to do postpartum | Midwives | All births including stillbirths x % of cases w/o 4 antenatal care visits x % HIV prevalence in all adults. | 1,380 | HIV/AIDS Estimates and projections to 2015 | 0.37% |
| 27+28 | C-section for maternal/ fetal indication (including prophylactic antibiotics for C-section) | 90 mins surgery (doctor and nurse), 30 mins post-surgery each day by midwife and nurse for 7 days. | OB and nurse in surgery 90 mins. Post-op 7 days 15 mins by midwife, 15 mins by nurse. | All births, includingstillbirths (y) x fixed assumption on need for a C-section. | 286.765 | For Viet Nam we assume 20% | SoWMy assumes 5% |
| 29 | Induction of labour for prolonged pregnancy (midwife or nurse) | 20 mins for assessment by OB, 40 minutes to administer misoproptol and monitor (in addition to the normal labour monitoring by midwife) | | Pregnancies x % of pregnancies which go beyond 41 weeks | 71,691 | SoWMy assumes 5% | 5% |
| 30+25 | Management of post-partum hemorrhage (manual removal of placenta and/or surgical procedures and/or oxytocics) | 5 days hospitalization. Immediate stopping of blood loss and resolving cause of hemorrhage by team for 1 hour. Followed by intensive monitoring for 4 hours on first day. Next days 2 hours per woman for 4 days | Midwife and doctor together stop bleeding and resolve cause. Afterwards doctor 5 mins per day and midwife rest of time. | WRA x incidence of post-partum hemorrhage per 1,000 women aged 15-49 | 102,519 | AbouZahr 2003 [6.2% or 8.1%] | 7.15% |
| 39 | Management of post-partum hemorrhage (manual removal of placenta and/or surgical procedures and/or oxytocics) | | | | 86.428 | 3.6 | 2.77 or 4.5 per 1000 WRA |

*MICS= Multi-Indicator Cluster Survey; SoWMy=State of the World's Midwifery (report); WPRO=Western Pacific Regional Office (WHO); WRA=women of reproductive age*

## D. Postpartum/postnatal care

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| 31-34, 36-38 | Postpartum preventive care-family planning, anemia, thermal care, exclusive breastfeeding, skin-to-skin, immunization, initiate ARV therapy (refer) | 4x 20 mins including care of mother and child | Midwife | All births including stillbirths, 4 contacts | 5,735,308 | | |
| 35 | Detect and treat postpartum sepsis (Puerperal in mother) | 10 mins doctor diagnosis and prescription, 5 min visit remaining 4 days. 1 hour of nurse, 30 mins of auxiliary time per day for 5 days inpatient plus 30 mins lab tech time | Assumes midwife role is to support nurse. | WRA x incidence of post-partum sepsis per 1000 WRA | 65,838 | AbouZahr 2003 [% of live births] | 4.40% |
| 39 | Neonatal resuscitation with bag and mask | 20 mins doctor 20 mins midwife | doctor plus midwife | Live births x 0.01 | 14,963 | SoWMY assumption | 1% |
| 40 | Kangaroo mother care | 30 mins for preterm babies | Midwife | Live births x % of newborns with low birth weight [preterm birth used instead] | 176,565 | Nguyen et al, 2004 | 11,80% |
| 41 | Extra support for feeding small and preterm babies | 5x15 mins feeding counselling (as with ART) | Midwives | All births including stillbirths x preterm birth rate | 169,192 | Nguyen et al, 2004 | 11.80% |
| 42 | Management of newborns with jaundice | No information about time | | Live births x % of newborns with jaundice requiring phototherapy | 91,149 | SoWMY assumption | 6% |

| | | Staff time assumption (from OneHealth with adjustments for Viet Nam) | % of services provided by different providers, assumptions for Viet Nam | SoWMy assumption | Estimated contacts | Data source | Additional data |
|---|---|---|---|---|---|---|---|
| 43 | Initiate prophylactic ARV for babies exposed to HIV + feeding counselling | ART = 60 minutes per newborn, 5x15 mins counselling on infant feeding | Midwife except 10 mins with doctor to prescribe | All births including stillbirths x (1-% of cases with 4 antenatal care visits)x % of HIV positive adults | 1,700 | VAAC report | 1700 infants |
| 44 | Monitoring and assessment and antibiotic treatment if necessary for newborns at risk of bacterial infection (includes also treatment of sepsis, meningitis, pneumonia in newborns) [Note we have removed the presumptive treatment as the intervention due to high risks of antibiotic resistance] | 10 mins midwife time plus 5 mins follow-up plus 5 minutes doctor diagnosis and prescription [If sepsis, then the time is substantially more, including: 40 mins/day*7 days midwife time for 90% of cases and for 10% of cases requires full supportive care including doctor 60 mins nurse 120 mins per day for 10 days] | Doctor for assessment, request tests, prescription if necessary | Live births x incidence of bacterial infection in newborns | 299,263 | SoWMy assumption | 20% |
| 45 | Surfactant to prevent respiratory distress syndrome in preterm babies | Combined with item 46 below | | Live births x preterm birth rate | 176,565 | Nguyen et al, 2004 | 11.80% |
| 46 | Continuous positive airway pressure (CPAP) to manage babies with respiratory distress syndrome (RDS) | 24 hour care x 14 days, 1 to 1 by midwife, doctor 20 mins per day | | Live births x incidence of respiratory distress syndrome in newborns | 14,963 | SoWMy assumption | 1% |

*ART=antiretroviral therapy; ARV: antiretroviral; SoWMy=State of the World's Midwifery (report); VAAC=Viet Nam Administration of HIV/AIDS Control; WRA=women of reproductive age*

# Annex 4:

# Analysis of financial protection of 46 essential midwifery interventions, 2016

This analysis assumes the following for health insurance in Viet Nam:

1) If family planning (FP), it is not covered.

2) If STI, asymptomatic screening is not covered, but treatment is (preventive screening).

3) Folic acid and calcium supplementation are preventative, and are food supplements rather than pharmaceuticals, so they are not covered by insurance (preventive).

4) Items that are part of national target programs (NTPs) or funded by international donors are not covered by insurance (ambiguous).

5) Treatment of addiction is not covered (smoking cessation).

6) Abortion is only covered if needed due to fetal or maternal problems, not if due to unwanted pregnancy, so it is generally not covered.

7) Some services are only covered if provided at a health facility, mainly delivery and postpartum care. Home deliveries or home visits for postpartum care are excluded.

| | Midwifery intervention | Health insurance | State budget support |
|---|---|---|---|
| **PRE-PREGNANCY** | | | |
| 1 | Family planning advice | No, FP | GOPFP |
| 2 | Family planning methods-delivery | No, FP | GOPFP subsidized for some groups (20/2013/TTLT-BTC-BYT) |
| | Condoms | | |
| | Pills | | |
| | Injectables | | |
| | IUD | | |
| | Female sterilization | | |
| 3 | Prevention and management of sexually transmitted infections (STIs) and HIV in all women of reproductive age (WRA) | | |
| a1 | Prevention of HIV through voluntary counselling and testing (VTC) of non-pregnant women | No, preventive screening | Viet Nam Administration of HIV/ AIDS Control (VAAC)-international donor funding support |
| a2 | Prevention of STI as part of gynecological exams | No, preventive screening | No |
| b | Management of STIs (non-pregnant women) | Yes, treatment only | No |
| | Syphilis (giang mai) | | |
| | Gonorrhea (lậu) | | |
| | Chlamydia | | |
| | Trichomoniasis | | |
| c | Management of HIV | Yes (15/2015/TT-BYT) | VAAC- international donor funding support |
| 4 | Folic acid fortification/supplementation (in WRA with anemia>20%) | No, preventive | No |
| **PREGNANCY** | | | |
| | Basic antenatal care | Yes (but unclear which of the following items are included) | |
| 5 | Iron and folic acid supplementation (4 ANC visits) | No, preventive | No |
| 6 | Tetanus vaccination | No, covered by NTP | NTP-EPI |

| | Midwifery intervention | Health insurance | State budget support |
|---|---|---|---|
| 7 | Prevention and management of malaria with insecticide-treated nets and antimalarials | No, covered by NTP | NTP-Malaria |
| a | Prevention | | |
| b | Management | | |
| 8 | Prevention and management of STIs (as part of antenatal care) | | |
| a | Information, education and communication (IEC) about HIV to pregnant women. | No, preventive | VAAC |
| | HIV testing during pregnancy | Yes (15/2015/TT-BYT) | VAAC-International donor funding support |
| | Prevention of STIs and STI screening (except Syphilis) during pregnancy | No, preventive | |
| b | Management of STIs | Yes, treatment only | No |
| | Gonorrhea (lậu) | | |
| | Chlamydia | | |
| | Trichomoniasis | | |
| c | Management of HIV (during pregnancy) | Yes (15/2015/TT-BYT) | VAAC-International donor funding support |
| 9 | Calcium supplementation to prevent hypertension | No, preventive | No |
| 10 | Interventions for cessation of smoking | No, addiction | No |
| 11 | Screening for and treatment of syphilis | | |
| a | Screening for syphilis (rapid plasma reagent test) | No, preventive | No |
| b | Treatment of syphilis | Yes, curative | No |
| 12 | Antihypertensive drugs to treat high blood pressure (including low-dose aspirin to prevent pre-eclampsia) | Yes, curative | No |
| 13 | Antihypertensive drugs to treat pre-eclampsia (including low-dose aspirin to prevent pre-eclampsia) | Yes, curative | No |
| 14 | MgSO¬4 for eclampsia (including hospital services for eclampsia treatment, but not duplicating C-section time) | Yes, curative | No |
| 15 | Antibiotics for pre-term premature rupture of membranes (pPROM) | Yes, curative | No |

| | Midwifery intervention | Health insurance | State budget support |
|---|---|---|---|
| 16 | Corticosteroids to prevent respiratory distress in preterm birth | Yes, curative | No |
| 17 | Safe abortion | Conditional, must be due to health risk to mother or fetus. | No |
| | Vacuum aspiration (VAC) | | |
| | Medical | | |
| | Dilation and curettage (D&C) | | |
| 18 | Post-abortion care (for unsafe abortions) | Yes, curative | No |
| 19 | Reduce malpresentation at birth with external cephalic version | Yes, delivery care | No |
| 20 | Induction of labour to manage pre-labour rupture of membranes at term | Yes, delivery care | No |
| **CHILDBIRTH** | | | |
| 23 | Normal labour and delivery management and social support during childbirth | Yes, delivery care excluding births outside health facilities | No |
| 21 | Active management of 3rd stage of labour to deliver placenta to prevent post-partum hemorrhage (uterine massage) | Yes, delivery care excluding births outside health facilities | No |
| 22 | Active management of 3rd stage of labour to deliver placenta to prevent post-partum hemorrhage (uterotonics ) | Yes, delivery care excluding births outside health facilities | No |
| 24 | Active management of 3rd stage of labour to deliver placenta to prevent post-partum hemorrhage (cord traction) | Yes, delivery care excluding births outside health facilities | No |
| 26a | Screen and manage HIV during childbirth-screen if not already tested | Yes (15/2015/TT-BYT) | VAAC-International donor funding support |
| 26b | Screen and manage HIV during childbirth-treatment | Yes (15/2015/TT-BYT) | VAAC-International donor funding support |
| 27 | Prophylactic antibiotics for C-section) | Yes, delivery care | No |
| 28 | C-section for maternal/ fetal indication | Yes, delivery care if medically necessary | No |
| 29 | Induction of labour for prolonged pregnancy (midwife or nurse) | Yes, delivery care | No |
| 25 | Management of post-partum hemorrhage (manual removal of placenta) | Yes, delivery care | No |

| | Midwifery intervention | Health insurance | State budget support |
|---|---|---|---|
| 30 | Management of post-partum hemorrhage (surgical procedures and/or oxytocics) | Yes, delivery care | No |
| **POSTNATAL CARE/NEONATAL CARE** | | | |
| 31 | Postpartum preventive care-family planning | No, FP | No |
| 32 | Postpartum preventive care-maternal anemia | Yes, delivery care at health facility | No |
| 33 | Postnatal preventive care-immediate thermal care | Yes, delivery care at health facility | No |
| 34 | Postnatal preventive care-Initiate exclusive breastfeeding | Yes, delivery care at health facility | No |
| 36 | Postnatal preventive care-hygienic cord and skin care | Yes, delivery care at health facility | No |
| 37 | Postnatal preventive care-Newborn immunization | No, covered by NTP | NTP-EPI |
| 38 | Initiate ARV therapy for newly identified mothers | Yes (15/2015/TT-BYT) | VAAC-International Donor funding support |
| 35 | Detect and treat postpartum sepsis (Puerperal in mother) | Yes, curative | No |
| 39 | Neonatal resuscitation with bag and mask | Yes, delivery care | No |
| 40 | Kangaroo mother care | Yes, delivery care | No |
| 41 | Extra support for feeding small and preterm babies | No, preventive | No |
| 42 | Management of newborns with jaundice | Yes, curative | No |
| 43 | Initiate prophylactic antiretroviral (ARV) therapy for babies exposed to HIV + feeding counselling | Yes (15/2015/TT-BYT) | VAAC-International Donor funding support |
| 44 | Presumptive antibiotic therapy for newborns at risk of bacterial infection (includes also treatment of sepsis, meningitis, pneumonia in newborns) | Yes, curative | No |
| 45 | Surfactant to prevent respiratory distress syndrome in preterm babies | Yes, curative | No |
| 46 | Continuous positive airway pressure (CPAP) to manage babies with respiratory distress syndrome (RDS) | Yes, curative | No |

# Annex 5:

# Detailed tables presenting specific policy documents in Viet Nam's midwifery legal framework

### Table A5. 1: Policies related to setting the scope of practice of midwives

| Policy code | Policy |
|---|---|
| Ministry of Health (MOH) Circular 07/2013/TT-BYT 8 March 2013 | Regulating standards, function, tasks of village health workers (VHWs) (including village birth attendants [VBAs]) |
| Joint Circular 26/2015/TTLT-BYT-BNV 7 October 2015 | Regulating occupational code, standards, professional functions of nurses, midwives and medical technicians (replaced 12/2011/TT-BYT) |
| Joint Circular 10/2015/TTLT-BYT-BNV 27 May 2015 | Regulations on the occupational code, standards, professional functions of doctors, preventive medicine doctors, and assistant doctors |
| MOH Circular 50/2014/TT-BYT | Regulations on classifying surgeries and procedures and the labour norms for each type |
| MOH Decision 385/2001/QD-BYT 13 February 2001 | Issuing regulations on reproductive health care technical tasks at different health care facilities |
| MOH Circular 05/2016/TT-BYT 26 February 2016 | Regulating prescribing of medications in outpatient care |
| MOH Circular 23/2011/TT-BYT | Guiding use of drugs in medical facilities with inpatient beds |
| MOH Decision 1895/1997/QD-BYT 29 February 2016 | Issuing the hospital regulations |
| MOH Circular 43/2013/TT-BYT 11 December 2013 | Regulating details on determining the level of provider in the medical system that should be capable and allowed to provide different technical interventions |

## Table A5. 2: Policies on pre-service education for midwives

| Policy code and date | Policy name | Specific to midwives? | Follow ICM standards? |
|---|---|---|---|
| **Curricula** | | | |
| MOH Decision 342/QD-BYT 24 January 2014 | Approving materials on "basic competencies of Vietnamese midwives" | Yes | Yes |
| MOH Decision 2847/QD-BYT 15 August 2012 | Approval of the curriculum and materials for training VBAs | VBA distinct from midwife | No |
| MOH Decision 23/2003/QD-BYT 6 January 2003 | Issuing the curriculum framework for secondary midwifery training | Yes | No |
| Ministry of Education and Training (MOET) Circular 11/2010/TT-BGDDT 23 March 2010 | Issuing the curriculum framework for tertiary training in health sciences, junior college level | Yes | Yes |
| MOH Decision 659/QD-BYT 25 February 2015 | Issuing professional conditions to ensure midwife training at university and junior college level in Viet Nam | Yes | Yes |
| **Practice facilities for midwifery training** | | | |
| MOH Circular 09/2008/TT-BYT 1 August 2008 | Guiding linkages between health worker training facilities with practice hospitals for training, research, and health care of the people | No | No |
| Draft Decree to replace MOH circular 09, (expected in 2016) | Regulating collaboration between training facilities and practice facilities in health sciences training | No | No |
| **MOET management of education through codes** | | | |
| Prime Ministerial Decision 38/2009/QD-TTg 9 March 2009 | Issuing the education and training list of the national education system | No, joint with nursing | n/a |
| MOET Circular 34/2011/TT-BGDDT 11 August 2011 | Issuing the IVth level education and training codes for secondary training | Yes | n/a |
| Integrated circular 15/VBHN-BGDDT 8 May 2014 | Issuing the IVth level education and training codes for junior college and university (includes 14/2010/TT-BGDDT and 32/2013/TT-BGDDT) | Yes, junior college | n/a |

## Table A5. 3: Policies on professional registration of midwives

| Policy code and date | Policy name | Specific to midwives? |
|---|---|---|
| Law 40/2009/QH12 23 November 2009 | Law on Examination and Treatment | Yes |
| Decree 87/2011/ND-CP 27 September 2011 | Stipulating details and guidance for implementing articles of the Law on Examination and Treatment (roadmap for granting professional registration) | No |
| Integrated Circular 01/VBHN-BYT [combines Circulars 41/2011/TT-BYT and 41/2015/TT-BYT] 26 February 2016 | Guiding granting of practice certificates for medical practitioners and operating licenses for medical facilities | Combines regulations on midwives, technicians, and nurses |

## Table A5. 4: Regulations on continuing medical education, education to upgrade qualifications, and re-issuing revoked licenses

| Policy code and date | Policy name |
|---|---|
| **Continuing medical education** | |
| MOH Decision 493/QD-BYT 17 February 2012 | Issuing regulations on standards to ensure quality of units providing continuing medical education to health workers |
| MOH Decision 492/QD-BYT 17 February 2012 | Issuing of continuing medical education certification codes for units participating in continuing medical education for health workers |
| MOH Circular 22/2013/TT-BYT 9 August 2013 | Guiding continuing medical education for health workers |
| Official letter from ASTT 2034/BYT-K2DT 18 April 2014 | Strengthening quality of continuing medical education for health workers |
| MOH Decision 3982/QD-BYT 3 October 2014 | Approval of the guidelines materials on basic skills of birth attendants |
| MOH Decision 5063/QD-BYT 5 December 2014 | Approval of the curriculum and training materials for care and feeding of infants and small children |
| **Policies on re-issuing revoked licenses** | |
| MOH Decision 2803/QD-BYT 2 August 2013 | Issuing the procedures to organize and operate a council to advise on issuing, re-issuing practice certificates of the MOH |
| MOH Decision 3673/QD-BYT 17 September 2014 | Issuing new administrative procedures related to management of health workers, specifically on re-issuing licenses to health workers whose licenses have been revoked |
| **Upgrade training from lower to higher qualification** | |

| | |
|---|---|
| Official letter from ASTT 1915/BYT-K2DT 8 April 2013 | Guiding implementation of some regulations on upgrade training at junior college and university levels in the health sciences |
| MOET Circular 08/2015/TT-BGDDT 21 April 2015 | Revising and amending articles in regulations on upgrade training at junior college and university levels issued in MOET Circular 55/2012/TT-BGGDT |
| Integrated Circular 02/VBHN-BGDDT (TT08 2015 and TT55 2012) 5 August 2015 | Regulating upgrade training at junior college and university levels |

### Table A5. 5: Regulations related to grievances and their redress

| Policy code | Policy title |
|---|---|
| Law 02/2011/QH13 11 November 2011 | Law on Grievances (revised from 1998 Law on Grievances) |
| Decree 75/2012/ND-CP 3 October 2012 | Regulating details of some articles in the Law on Grievances |
| MOH Decision 44/2005/QD-BYT 3 October 2012 | Issuing regulations on redressing grievances in the field of health |
| Decree 122/2014/ND-CP 25 December 2014 | Organization and activities of the health inspectorate |
| MOH Circular 35/2013/TT-BYT 30 October 2013 | Regulating revoking of medical practice certificates and facility operating licenses and halting professional operations of practitioners and facilities |

### Table A5. 6: Policies related to code of conduct and ethics for midwives

| Policy code and date | Policy name |
|---|---|
| MOH Decision No. 2088/BYT-QĐ 06 November 1996 | Issuing the medical ethics regulations |
| MOH Circular No. 07/2014/TT-BYT 25 February 2014 | Regulations on the code of conduct for government officials, government employees, and other staff working in health facilities (updated from 2008 version) |
| MOH Decision No. 2151/QD-BYT 4 June 2015 | Approving the plan for implementing "Reforms of service style and attitude of health workers oriented towards patient satisfaction." |
| MOH Plan No. 784/KH-BYT 20 August 2015 | Training for reporters at health facilities in relation to skills in communicating and conducting themselves to contribute to reforming the service attitudes and behaviours of health workers, with an orientation towards increasing satisfaction of patients |
| Decree 176/2013/ND-CP 14 November 2013 | Regulations on penalties for administrative violations in the field of health |

# Annex 6:

# Availability of different categories of midwifery services, 2010

The Maternal and Child Health Department (MCHD) of the Ministry of Health (MOH) implemented a survey on the situation of the Vietnamese reproductive health service capacity and network in 2010. A smaller follow-up survey was implemented in 2013. The tables below summarize the findings on availability of various subsets of reproductive health services in different types of facilities. Questions were not asked about all items in all facilities. The survey seems to have assumed that higher-level facilities would all have basic capacities, and that the commune health stations and regional polyclinics would not have high tech service capabilities. There are an additional nine provincial specialized obstetrics or combined obstetrics and paediatric hospitals, most of which provide the full range of reproductive health services - so they are not included in the following tables. The number of each type of facility is provided in the first table to give some perspective.

### Table A: Ultrasound service availability by type and level of facility, 2010

| | Commune health station | Regional polyclinic | RH dept. of district health center | District hospital | Provincial RH center | Provincial general hospital |
|---|---|---|---|---|---|---|
| N (sample size) | **10.981** | 510 | 687 | 595 | 64 | 110 |
| OB/GYN ultrasound (diagnostic ultrasound, 2D ultrasound) | 7% | 39% | 35% | 71% | 98% | 94% |
| Intravaginal ultrasound | | | 10% | 24% | 80% | 65% |
| 3D ultrasound | | | 6% | 32% | 41% | 66% |
| Prenatal screening ultrasound | | | 14% | 40% | 58% | 68% |
| Cranial ultrasound | | | | | | 29% |
| Color doppler ultrasound | | | | | | 76% |

*RH=reproductive health*

## Table B: Sexually transmitted infection (STI)-related service availability, 2010

| | Commune health station | Regional polyclinic | RH dept. of District health center | District hospital | Provincial RH center | Provincial general hospital |
|---|---|---|---|---|---|---|
| HIV screening test (rapid test for HIV screening) | 3% | 19% | 64% | 88% | 67% | 88% |
| Hepatitis B (HepB) screening test (rapid test for HepB screening) | 3% | 16% | 59% | | 63% | |
| Syphilis screening test | 23% | 18% | 18% | | 41% | |
| Chlamydia testing | | | 18% | | 36% | |
| Microscopic evaluation of fresh vaginal discharge (e.g. gonorrhea screening) | 4% | 17% | 67% | | 98% | |
| Examine and treat common reproductive health infections (RTIs), STIs | 93% | 86% | 77% | 93% | 98% | 92% |

## Table C: Gynecological cancer detection and treatment of pre-cancerous lesions

| | Commune health station | Regional polyclinic | RH dept. of district health center | District hospital | Provincial RH center | Provincial general hospital |
|---|---|---|---|---|---|---|
| Clinical exam to detect breast lumps, uterine cysts, cervical cancer | 63% | 66% | 71% | | | |
| Take cervical cell sample for PAP smear | 9% | 21% | 33% | | 80% | |
| Analyze Pap Smear | .. | .. | 20% | | 77% | 64% |
| Acetic acid (VIA) or Lugol's iodine (VILI) | 7% | 33% | 53% | | .. | |
| Colposcopy | .. | .. | 17% | 32% | 89% | 75% |
| Cryotherapy/ cauterization of cervix (HPV treatment) | 2% | .. | | 36% | 75% | 77% |
| Mammogram | .. | .. | 3% | 15% | 13% | 32% |
| Hysterosalpingography (uterine x-ray) | .. | .. | 2% | 8% | 5% | 36% |
| HPV vaccination services | .. | .. | 13% | | 16% | |

## Table D: Family planning services

| | Commune health station | Regional polyclinic | RH dept. of district health center | District hospital | Provincial RH center | Provincial general hospital |
|---|---|---|---|---|---|---|
| Dispense condoms | 76% | 40% | 56% | | | |
| Dispense contraceptive pills | 81% | 44% | 63% | | | |
| Contraceptive injections | 78% | 51% | 79% | | | |
| Contraceptive implants | | | 62% | 35% | 98% | 36% |
| IUD insertion and removal | 82% | 77% | 87% | | 100% | |
| Emergency contraception | 21% | 6% | 14% | 19% | | |
| Male sterilization | | | | 57% | 52% | 68% |
| Female sterilization | | | | 71% | 45% | 92% |

## Table E: Abortion service availability

| | Commune health station | Regional polyclinic | RH dept. of district health center | District hospital | Provincial RH center | Provincial general hospital |
|---|---|---|---|---|---|---|
| Medical abortion below 7 weeks | | 10% | | | 92% | |
| Suction abortion below 7 weeks (menstrual regulation) | 32% | 49% | 69% | | 100% | |
| Suction abortion up to 12 weeks | | 9% | 33% | 12% | 97% | 73% |
| D&C for abortion between 13 and 18 weeks (phương pháp nong và gắp) | | | | 51% | 20% | 53% |
| Abort a molar pregnancy | | | | | | 80% |
| Abortion due to medical conditions | | | | | | 78% |
| Kovak abortion | | | | | | 54% |
| Medical abortion up to 22 weeks of pregnancy | | | | | | 51% |

## Table F: Antenatal care service availability, 2010

| | Commune health station | Regional polyclinic | RH dept. of district health center | District hospital | Provincial RH center | Provincial general hospital |
|---|---|---|---|---|---|---|
| Early detection of pregnancy (any method) | 44% | 52% | 74% | dk | 97% | |
| Antenatal exam | 93% | 70% | 75% | dk | 98% | |
| Advise, guide pregnant women in use of iron, folic acid and other micronutrients | .. | | | dk | | |
| Provide iron, folic acid, multivitamins to pregnant women | .. | | | dk | | |
| Anti-tetanus vaccination for pregnant women | 95% | 45% | 45% | dk | 33% | 4 |
| Prenatal screening for fetal anomalies | | | 49% | dk | 53% | 46% |
| Triple test fetal screening | | | | | | 7% |
| Amniocentesis | | | | | | 6% |
| Monitor and manage fetus with pathology | | | | dk | 52% | 90% |

*Note: dk means do not know*

**Table G: Birth attendance services availability, 2010**

| | Commune health station | Regional polyclinic | District hospital | Provincial general hospital |
|---|---|---|---|---|
| Monitor labour using partograph | 75% | 72% | 92% | 95% |
| Deal with 5 obstetric complications | 81% | 82% | | |
| -Normal delivery (non-breech) | 84% | 83% | | |
| -Active management of 3rd stage of labour | 74% | 76% | 96% | 95% |
| -Use of MgSO4 to treat pre-eclampsia and eclampsia | 58% (2013) | không có thông tin | không có thông tin | |
| -manual removal of the placenta (in case of hemorrhage) | 49% | 58% | | |
| -Fundal massage | 65% | 72% | | |
| Episiotomy and sutures | 78% | 82% | | |
| Wound care for infected episiotomy site | 62% | 66% | | |
| Sutures for level 2 perianal tear | 54% | 64% | | |
| Sutures for repair of torn cervix, vagina | | | | 95% |
| Forceps delivery | | | 39% | 65% |
| Suction delivery | | | 45% | 76% |
| C-section | | | 68% | 93% |
| Twin delivery | | | | 96% |
| Breech delivery | | | | 95% |

## Table H: Postpartum/neonatal service availability

| | Commune health station | Regional polyclinic | RH dept. of district health center | District hospital | Provincial RH center | Provincial general hospital |
|---|---|---|---|---|---|---|
| Vitamin K1 injection for newborn | 62% | 68% | | | | |
| Neonatal resuscitation (for asphyxia) | 78% | 81% | | | | |
| Umbilical care of newborn | 88% | 82% | | | | |
| Guide mother in kangaroo care | 82% | 75% | 63% | 72% | | 56% |
| Advise mother on breastfeeding | 97% | 85% | 87% | 94% | 100% | 89% |
| Care of newborn > 2000 g not suffering respiratory distress and able to breastfeed | | | | | | |
| Care of premature underweight infant in incubator | | | | 27% | | 74% |
| Bililights for jaundice | | | | 36% | | 82% |
| Use of CPAP for treatment of neonatal respiratory distress | | | | 17% | | 65% |
| Expanded program on immunizations (EPI) | 98% | | | | | |
| Postpartum care visit at home | 95% | 45% | | | | |


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