The country brief has been designed to prompt and inform policy discussions on how the composition, skill-mix, deployment and enabling environment of the midwifery workforce impacts on the delivery of SRMNH services for all women and newborns who need them. This visual guide describes the graphics on the two-page country brief and provides examples of the indicative policy questions that may arise.

**First page: Where are we now?**

The first page of the country brief can be used to discuss the extent to which the workforce is currently able to deliver SRMNH services for all women and newborns who need them. Proxies for availability, accessibility and quality are presented to facilitate these discussions. All data are from 2012.

**WHAT DO WOMEN AND NEWBORNS NEED?**

The brief starts by showing some of the indicators of need that must be met if universal coverage is to be attained. The number of pregnancies, their geographical distribution, and the volume of services that must be provided are displayed in this section. Other needs include the provision of sexual and reproductive health services, including addressing unmet need for family planning.

**Indicative policy question:** Is the policy and planning environment in the country consistent with universal coverage of SRMNH services, responsive to what women and newborns need?

**WORKFORCE AVAILABILITY AND MET NEED**

The brief then considers how many health workers are available to meet this need. The number (by headcount) of all workers reported and the percentage time each one spends on MNH services are shown. This information provides the number of available health workers by their full-time equivalent. Only by considering the number of full-time equivalent health workers can a true picture of availability be constructed. Health workers are grouped by category, while their country cadre name is provided in footnote 1.

The section also provides an estimate of how work force availability compares with need. An estimated percentage for the national aggregate summarizes the extent to which the available midwifery workforce, taking into account which health workers provide which services, has enough time to deliver the 46 essential SRMNH interventions to all women and newborns who need them. The estimate of met need is highly sensitive to the package of care (e.g. the 46 essential interventions), the number of health workers reported, the percentage of time they spend on SRMNH services, and the roles they perform.

**Indicative policy questions:** Have all cadres that contribute to the midwifery workforce been reported, by name and by the percentage of time each cadre spends on SRMNH services? Does the estimate of met need at the national aggregate level mask inequities, e.g. at the sub-national level, or when disaggregated by urban/rural and socio-economic strata?

**FINANCIAL ACCESSIBILITY**

Even if there are sufficient health workers, the services they provide may not be affordable. This graph shows the number of the 46 essential SRMNH interventions that are included in each country’s minimum health benefits package and available free at the point of delivery, as an indication of the degree of financial protection offered to women and their newborns in accessing SRMNH care.

**Indicative policy questions:** Is the minimum health benefits package guaranteed to all women regardless of ability to pay? Are there national plans to provide a package of SRMNH services that include and go beyond the 46 essential interventions?

**GEOGRAPHICAL ACCESSIBILITY**

Health workers, and the facility from which they work, may not be equally distributed with regards to need. This graph shows the number of births in urban versus rural areas to indicate the geographical need for SRMNH services. Where data are available the graph also shows the number of births where a skilled birth attendant was reportedly available. This provides an indicative measure of workforce accessibility.

**Indicative policy question:** Is there a marked difference in access to the midwifery workforce in urban and rural areas and what policy measures can be taken to address this?

**EDUCATION, REGULATION, ASSOCIATION**

Education, regulation and professional associations are all crucial to support health workers in delivering quality midwifery care. This section provides information on the strength of the enabling environment within a country.

**Indicative policy question:** Is the enabling environment for quality health workers and quality health services meeting national and international standards, and if not where can progress be made?
Second page: What might 2030 look like?

The second page of the country brief aims to prompt policy discussion on the future evolution of the midwifery workforce compared with the future scale of population need. The last section, “Estimates and projections to 2030”, compares future availability of the health workforce and future needs for SRMNH services under a variety of scenarios. Given the absence of data in some countries, this analysis should be seen as a starting point for policy discussions (including around the availability and quality of national data) rather than as a statement of fact.

PROJECTED PREGNANCIES AND MORTALITY REDUCTION

Achieving universal coverage means anticipating and responding to future needs. This section shows the evolution of need (expressed as the annual number of pregnancies in urban and rural areas) in the period 2012-2030. Other needs for sexual and reproductive health services will be determined by changes in the number of women of reproductive age, including the number of adolescents.

The section also provides an indication of the targets for reductions in maternal and neonatal mortality, as proposed in the Ending Preventable Maternal Mortality by 2030 initiative and the Every Newborn Action Plan. These proposed targets are subject to national policy priorities and decisions.

Indicative policy questions: Is there an opportunity in your country to address unmet need for family planning and therefore reduce the annual number of pregnancies? What is the impact of urban/rural population change on the selection, education and deployment of the midwifery workforce? What are the midwifery workforce implications to achieve the accelerated reductions in maternal and neonatal mortality by 2030?

ESTIMATES AND PROJECTIONS TO 2030

This section illustrates the potential evolution of the midwifery workforce under "business as usual" assumptions and according to different policy scenarios.

The first row of three graphs considers the number of health workers who will enter and exit the midwifery workforce in the period 2012 - 2030. The graph to the left illustrates how the full-time equivalent number of health workers will reduce over time, and the shaded area represents the "outflows" in this period. The graph in the centre identifies the entries from national education institutions, and the third graph to the right the cumulative effect of entries and exits.

‘What if’ scenarios are presented as examples. These illustrate the potential impact of policy decisions and demonstrate the changes in met need that could be realised through four different scenarios: reducing the number of pregnancies per annum, increasing the supply of midwives, nurses and physicians, improving efficiency and reducing voluntary attrition. The bottom two graphics highlight the difference between “business as usual” and the combination of the policy scenarios. The changes in met need are based on the country data reported and a standard set of decision rules in Annex 5.

Indicative policy questions: What are the opportunities to improve the efficiency and management of the current midwifery workforce? What is the turnover of the midwifery workforce today, and are there mechanisms in place to capture all exits and understand why health workers are leaving? What are the national policy priorities for the skill-mix and deployment of the midwifery workforce and how will this impact on met need?
SENEGAL

In 2012, of an estimated total population of 13.7 million, 7.4 million (54%) were living in rural areas and 3.3 million (24%) were women of reproductive age; the total fertility rate was 5. By 2030, the population is projected to increase by 59% to 21.9 million. To achieve universal access to sexual, reproductive, maternal and newborn care, midwifery services must respond to 1 million pregnancies per annum by 2030, 53% of these in rural settings. The health system implications include how best to configure and equitably deploy the SRMNH workforce to cover at least 66 million antenatal visits, 11.7 million births and 46.7 million post-partum/postnatal visits between 2012 and 2030.

WHAT WOMEN AND NEWBORNS NEED (2012)

769,000 PREGNANCIES A YEAR = HOW MANY EPISODES OF CARE?

Number and distribution of pregnancies (2012)

<table>
<thead>
<tr>
<th>Pre-Pregnancy</th>
<th>Antenatal</th>
<th>Birth</th>
<th>Post-Partum</th>
<th>Postnatal</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRE-PREGNANCY (all women of reproductive age)</td>
<td>≈ 5,724,000</td>
<td>≈ 3,075,000</td>
<td>≈ 543,000 skilled birth attendance</td>
<td>≈ 2,173,000 routine visits</td>
</tr>
</tbody>
</table>

WORKFORCE AVAILABILITY (2012)

Country classification of staff working in MNH

- Midwives: 3,946 (100)
- Midwives, auxiliary: 1,751 (100)
- Nurses: 1,295 (50)
- Nurses or nurse-midwives, auxiliary: na
- Clinical officers & medical assistants: na
- Physicians, generalists: 1,011 (25)
- Obstetricians & gynaecologists: 160 (100)

Time spent on MNH %

- Midwives: 98% (n=45)
- Midwives, auxiliary: 98% (n=1)
- Nurses: 90% (n=1)
- Nurses or nurse-midwives, auxiliary: na
- Clinical officers & medical assistants: na
- Physicians, generalists: 98% (n=1)
- Obstetricians & gynaecologists: 98% (n=1)

FINANCIAL ACCESSIBILITY

Percentage of 46 RMNH Essential Interventions included in minimum health benefits package, 2012

- Covered: 98% (n=45)
- Not covered: 2% (n=1)

GEOGRAPHICAL ACCESSIBILITY

Number of births with a skilled birth attendant (SBA)

- Rural: 769,000
- Urban: 450,000

MIDWIFERY EDUCATION

- Minimum high-school requirement to start training: Grade 12+
- Years of study required to qualify (rounded): 3
- Standardized curriculum? Year of last update: Yes, 2010
- Minimum number of supervised births in curriculum: 10
- Number of 2012 graduates/as % of all practicing midwives: 393/10
- % of graduates employed in MNH within one year: –

MIDWIFERY REGULATION

- Legislation exists recognizing midwifery as an autonomous profession: No
- A recognized definition of a professional midwife exists: Yes
- A government body regulates midwifery practice: Yes
- A licence is required to practise midwifery: No
- A live registry of licensed midwives exists: No
- Number of EmONC basic signal functions that midwives are allowed to practise (out of a possible 7): 7
- Midwives allowed to provide injectable contraceptives/intrauterine devices: Yes/Yes

PROFESSIONAL ASSOCIATIONS

- Year of creation of professional associations: 1963
- Roles performed by professional associations:
  - Continuing professional development: Yes
  - Advising or representing members accused of misconduct: No
  - Advising members on quality standards for MNH care: Yes
  - Advising the Government on policy documents related to MNH: Yes
  - Negotiating work or salary issues with the Government: No

na = not applicable; – = missing data
This section of the brief uses reported country data to calculate needs-based planning estimates and projections to 2030. The projections are sensitive to reported enrolment, graduation, % time spent on MNH services, age distribution, roles and attrition. In the absence of country data, standardized, evidence-based assumptions are used. The projections are indicative and should be used to verify the accuracy of country data and inform further policy discussion. Further information in the “How to read” section on page 50.

**PROJECTED OUTFLOWS**

by International Standard Classification of Occupations (ISCO-08)

- Outflow from attrition, death and retirement

**PROJECTED INFLOWS**

- Midwifery professionals
- Midwifery professionals, associates
- Nursing professionals
- Nursing professionals, associates
- Paramedical practitioners & medical assistants
- Medical practitioners, generalists
- Medical practitioners, specialists (Ob/Gyn)

**PROJECTED WORKFORCE**

- Available workforce projection (adjusted for skill-mix)
- Need projection

1. These health worker categories include the following country titles - Midwives: includes sages-femmes; Auxiliary midwives: includes matrones; Nurses: includes infirmiers d’etat; Generalist physicians: includes médecins généralistes; Obstetricians & gynaecologists: includes gyneco-obstétriciens. Source: SoWMy 2014 or secondary sources (WHO Global Health Observatory; government policy documents).
2. Year of data is as per most recent data available in STATCOMPILER.
3. Information refers to the midwife cadre category.
5. These are proposed targets for MMR and NMR by 2030 from the recommendations of Ending Preventable Maternal Mortality by 2030 and the Every Newborn Action Plan.