

# Inequity and leave no one behind: approaches to maternal and newborn healthcare<sup>1</sup>

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## Question

*What approaches have been tried to genuinely leave no one behind in access to maternal and newborn healthcare (MNH), and what has worked?*

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<sup>1</sup> This report is a part of a series of three reports related to reproductive, maternal, newborn, child and adolescent health (RMNCAH) issues.

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# 1. Summary

Several approaches have been tried to genuinely leave no one behind in access to maternal and newborn health care (MNH) and the related Reproductive Health (RH) services. Successful ones include individual governmental maternal health programmes, as well as global large-scale approaches and multi-sector programmes.

Access to maternal health can be explored through the availability, affordability, acceptability, and/or quality of the services (Levesque et al., 2013; Dalinjong et al., 2018). Evidence shows that the numbers and types of indicators used to assess this varied. Key indicators include increasing assistance of midwives or skilled birth attendants (SBAs), and attending four or more antenatal visits, which are part of the Sustainable Development Goal targets for 2030.

For the purposes of this review, disabilities refer to long-term visual, hearing, mental and physical impairment (Sherry, 2014; Mheta & Mashamba-Thompson, 2017). Women with disabilities are less likely to receive maternal healthcare services compared to women without disabilities (Devkota et al., 2018). There is little evidence about disabled women's access to maternal and newborn health services in low-income countries, and few studies consult disabled women themselves to understand their experience of care and care seeking (Morrison et al., 2014).

The focus in this review is on DFID priority countries with evidence of high maternal or newborn mortality. However, successful MNH approaches used in other countries are also included, where appropriate. Key conclusions on who/what to target for these MNH approaches that are found in the literature include:

- **Lowest income groups:** DFID traditionally uses the definition of the lowest 40% of a population, or the lowest quintiles of wealth/income. However, research from Kenya has shown that the lowest 20% of the population maybe left behind in Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) interventions (Keats et al, 2018). Financial protection programmes, such as cash transfer programmes (Mexico, The Philippines) and maternal vouchers schemes (Myamar), have targeted the lowest quintiles of populations.
- **Disabled mothers:** Inclusive programmes for mothers, newborns (e.g. business sponsorships in Kenya) and adolescents (e.g. in existing youth-friendly service centres in Nepal) proved successful.
- **Ethnic groups:** Evidence on successful approaches was minimal for MNH access programmes for specific ethnic groups. However, the long-running Aboriginal Midwifery Access Programme (AMAP) has proved to be a continued trusted and successful approach (Australia).
- **Crises and Geospatial inequalities:** Task-sharing of healthcare professionals as an approach increased access to emergency obstetric services (Sierra Leone, Uganda). 'Safe Spaces' (Bangladesh) and maternity waiting homes (Somalia) can offer care at all stages of pregnancy. Community programmes such as mobile clinics (Myanmar) and "Mama Taxis" (Kenya) also helped with access to MNH services in hard-to-reach areas.

This rapid review identifies the matrix of what approaches have worked across various parameters, bringing out the context needed for success. It is based on data from existing documentations of programmes (baseline reports, project briefs, project documentation of

interventions, and final evaluation reports), as well as academic publications, in order to update on the issues to consider, which include:

- **National and country level changes** e.g. scaling-up of multisector programmes help with MNH access (Bangladesh).
- **Outsourcing health services to non-government organisations** (NGOs) has also been successful (Bangladesh).
- **Key MNH programmes with impact evaluations** from several countries include the *USAID Maternal and Child Survival Programme (MCSP)*, which use integrated referral network and family-centred lifestyle approaches; as well as the *Maternal and Neonatal Health Initiative (MNHIB)*, which successfully reduced inequity in receiving antenatal care (ANC) from a trained provider. *Respectful Maternity Care (RMC)* training also increases the status of these essential health workers.
- **Technology** in the form of a *Safe Delivery App (SDA)* has also helped with improving health workers' basic emergency obstetric and newborn care (BEmONC) practices (DRC).

## 2. Current access to MNH services for various groups

The United Nations Children's Fund (UNICEF) reports that eight of the 10 most dangerous places to be born are in sub-Saharan Africa, where pregnant women are much less likely to receive assistance during delivery due to poverty, conflict, and weak institutions (UNICEF, 2018).

There is no single definition of access to healthcare services; however, a comprehensive view of access relates to the dimensions of availability, accessibility, accommodation, affordability and/or acceptability (Levesque et al., 2013; Dalinjong et al., 2018).

Access to MNH services differs for various groups. People living with disabilities, orphans, poor people, widows, and single parent households are commonly described as vulnerable or "at-risk" groups. However, individuals in these categories may be well-supported. Some people not in "at-risk" categories may be poorly supported and may have more health problems (Health Partners International, 2016: 5). Therefore, this section will specify the MNH access for different groups, in order to prevent inequality and leave no-one behind in the following categories.

### Low-income groups

DFID traditionally uses the definition of the lowest 40% of a population, or the lowest quintiles of wealth/income to determine low-income. However, recent data from Kenya, which examined a diverse set of essential preventative and curative coverage indicators,<sup>2</sup> shows that in some

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<sup>2</sup> These include: family planning needs satisfied (FPS); antenatal care with a skilled provider (ANCS); 4 or more antenatal care visits (ANC4); SBA; early initiation of breastfeeding (within 1 hour) (EIBF); 3 doses of diphtheria-tetanus-pertussis vaccine (DPT3); measles vaccination (MSL); full immunisation of children (FULL); vitamin A supplementation (within 6 months) (VITA); oral rehydration therapy (ORT) and continued feeding for children with diarrhoea, and care seeking for children with pneumonia (CPNM). Indicators selected for detailed sub-analysis were those that represented opposite ends of the continuum of care and had diverse delivery strategies (i.e. health systems based, outreach focused, or community led). All indicators were defined as per the Countdown to 2015 guidelines.<sup>2</sup>

Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) programmes mothers from the lowest 20% are being left behind (Keats et al., 2018). Therefore, this section provides some country evidence of some successful maternal and child health programmes focusing on the poorest people.

## 1. What works: Cash transfer programmes

Conditional cash transfer (CCT) programmes have been shown to increase health service utilisation among the poorest, but little is written on the effects of such programmes on maternal and newborn health. A systematic review by Glassman et al. (2013) found that CCT programmes have increased antenatal visits, skilled birth attendance (SBA), delivery at a health facility, and tetanus toxoid vaccination for mothers and reduced the incidence of low birthweight.

### **Mexico**

One of the most well-known cases of the use of cash transfer programmes is Mexico's *Oportunidades*. *Oportunidades*, originally called 'Progresa', is a CCT programme that was established in 1997, designed to improve the overall health, education, and nutrition of Mexico's children. At its inception, it primarily targeted rural villages as these were home to the most "at-risk" populations.

**Impact:** In terms of RMNCAH indicators, beneficiaries are 16 percentage points more likely to use a modern contraceptive method than non-beneficiaries (Lamadrid-Figueroa et al., 2010).

### **The Philippines**

Although the Philippines underwent economic growth between 2003 and 2006, poverty increased from 24.9% in 2003 to 26.5% in 2009. The number of poor increased from 22.2 million to 23.1 million from 2006 to 2009. *Pantawid Pamilya Pilipino Programme* (also known as the 4Ps), was designed by the Department of Social Welfare and Development to target these issues. It includes conditions that require pregnant women to attain pre- (ANC) and post-natal care (PNC), and to have a trained professional present during childbirth. Children under 5 years of age are also required to receive vaccinations and preventative health check-ups.

**Impact:** The programme has one of the most comprehensive poverty targeting databases in the world today.<sup>3</sup> It has been used extensively to identify "poor and near-poor" beneficiaries for national and local government programmes. Benefits include: lower maternal mortality in the past five years because more mothers deliver babies in health facilities (7/10 live births), and reduction in severe stunting among beneficiary children.

## 2. What works: The Maternal and Child Health Voucher Scheme (MCHVS)

### **Myanmar**

25.6% of the population in Myanmar live below the national poverty line. Myanmar had a low rate of maternal and child health services utilisation, especially in rural areas. Only 67.6% of pregnant

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<sup>3</sup> <https://pantawid.dswd.gov.ph/wp-content/uploads/2018/12/Pantawid-Pamilya-3rd-Quarter-Report-2018.pdf>

women in rural areas had four visits of ANC, which is the minimum care recommended by the World Health Organisation (WHO). Therefore, the MCHVS was introduced to address the high rate of maternal and infant mortalities. It aimed to increase access to maternal and child health services by SBAs, and improve the health of poor<sup>4</sup> pregnant women and their babies.

**Impact:** A pilot study of the voucher scheme was implemented in May 2013 in Yedarshey Township, Mandalay city. Pilasant et al., (2016) reported a mid-term review of the programme after 7 months of implementation, to determine the outcomes of the programme and its impediments. The results showed that 63% of eligible pregnant women who registered to the programme received voucher booklets, while the utilisation of most of the maternal and child health services increased over time; in particular, delivery by SBAs increased significantly ( $p < 0.01$ ) after implementing MCHVS. Overall, the programme was implemented well in terms of promoting and communicating the programme to people in Yedarshey Township. Although a number of targeted poor pregnant women were included in the programme, some beneficiaries were overlooked for a variety of reasons.<sup>5</sup> Nevertheless, both providers and beneficiaries who experienced the MCHVS service utilisation were satisfied with the programme.

## Geography: urban vs rural inhabitants

The very different nature of the health care infrastructure in urban and rural areas raises questions about the implications for equity in use of maternal health services in urban and rural domains (Kamal et al., 2016). Urban trends in maternal health care use are of particular interest, given that rapid urbanisation translates into increasing numbers of female migrants coming to cities. Most migrants arrive to cities with few resources. They often settle in slum areas with limited access to public services, thus creating pockets of extreme vulnerability in urban areas.

Literature on maternal healthcare utilisation in South Asia reveals some distinct patterns: female healthcare utilisation is lower in rural areas (Kamal et al., 2016). Socio-economic status is a primary determinant of access to maternal healthcare, and public health interventions initially increase the rich-poor gap, as they tend to reach the wealthier sections of society first (Kamal et al., 2016).

### 1. What works: Scaling-up of national MH/Multi-sector campaigns

#### ***Bangladesh***

Bangladesh has experienced a rapid decline in maternal mortality with the maternal mortality ratio (MMR)<sup>1</sup> declining from 322 (95% CI: 259–391) to 194 (95% CI: 149–238) deaths per 100,000 live-births between the two Bangladesh Maternal Mortality and Health Care Surveys conducted in 2001 and 2010. This impressive improvement in maternal mortality has been largely facilitated by a government drive, with support from donor partners, to scale-up the national strategy for maternal health. The strengthened efforts included upgrading of existing

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<sup>4</sup> Those with a daily household income of less than 4.6 PPP [purchasing power parity] USD (1,000 Myanmar kyats).

<sup>5</sup> This is due to criteria used in the scheme. Criteria such as daily maximum income, were not as helpful as expected due to seasonal fluctuations in household income from those in the agriculture sector, or pregnant women whose families had many members and earned slightly higher than the cut-off point.

health facilities to provide Emergency Obstetric Care (EmOc) services since the mid-1990s, and on early detection and timely referral of maternal complications. The government had also revamped the *Community Skilled Birth Attendants programme* in 2003 in order to meet the Development Goal target of having 50% of all births delivered by SBAs by 2015. Additionally, the *Maternal Health Voucher Scheme* (demand side financing), which aimed to increase use of maternal health services among the poor, was introduced in 2007 and covered 53 out of a total of 490 sub-districts (Kama et al., 2016).

## **Pakistan**

Chronic malnutrition among women of child bearing is a leading cause of birth complications, often leading to preventable deaths of mothers and newborns. Therefore, the Government had to take urgent and effective steps to ensure that women of child bearing age have sufficient iron and folic acid, and that health workers effectively promote better nutrition.

The National Nutrition Survey 2011 in Pakistan revealed a dramatic increase in maternal anaemia for women nationwide. The survey further reported that in the Sindh province, 62% of non-pregnant mothers and 59% of pregnant mothers were anaemic, leading to poor pregnancy outcomes for mothers and newborns. White Ribbon Alliance (WRA) Pakistan's *Maternal Anaemia Signified in Sindh (MASS)* campaign focuses on collaborating with the government and other partners to end maternal malnutrition, especially maternal anaemia. This collaboration concentrates on improving the availability of iron and folic acid supplements, increasing the percentage of women of childbearing age who receive effective counselling about the importance of taking iron and folic acid supplements, and improving awareness about anaemia among adolescent girls.

**Impact:** More than 100,000 signatures were gathered from citizens demanding the government to address the long-standing issue of maternal anaemia in Sindh. This and other advocacy efforts resulted in 25% increase in the nutrition budget of Sindh. Working with all 14 provincial and federal ministries of health and population welfare WRA Pakistan has grown best practices around maternal health, successfully advocating for the inclusion of magnesium sulphate (to reduce risk of eclampsia) in the provincial drug lists and the standardisation of protocols for administering the drug. Additionally, WRA Pakistan secured a commitment to include 10 nutrition-related messages in high school text books from the Sindh Department of Education and the Curriculum Board. Most notably, the government of Sindh is launching a USD 62 million scaling-up nutrition project which addresses all the objectives of WRA Pakistan's maternal anaemia campaign.

## **2. What works: National and county level changes**

### **Kenya**

Coverage of RMNCAH interventions has improved over time, but wealth and geospatial inequalities in Kenya are persistent (Keats et al., 2018). Populations in the north-eastern region were a clear target for intervention, as nearly three quarters of this largely insecure population live below the poverty line (Keats et al., 2018). In Western Kenya, improved access is not only linked to devolved health services, but also to other developments both at the national level (health campaigns, increased mobile telephony) and county level (improved transportation, relocation of available funds) (Kilonzo et al., 2017).

### 3. What works: Outsourcing services

#### ***Bangladesh***

The structure for health service provision is quite different in urban and rural areas of Bangladesh. The Ministry of Health and Family Welfare's (MOHFW) public health service delivery system (where primary care services are, in principle, offered for free) is not as extensive in urban areas. Primary health care provision in urban Bangladesh is largely under the jurisdiction of the Ministry of Local Government, Rural Development and Cooperatives. This Ministry mobilises and outsources the provision of health services to non-governmental organisations (NGO) projects such as NGO Health Service Delivery Project (NHSDP), Urban Primary Health Care Project, MANOSHI, and Marie Stopes (Kamal et al., 2016).

The NHSDP impact evaluation by USAID/ Measure Evaluation (Curtis et al., 2019) found that use of maternal health services increased in both areas, especially in rural areas. Changes in service use were similar across wealth quintiles; this was accompanied by a shift to the private sector for healthcare among all groups and wealth quintiles.

#### **Disabled mothers/adolescents/newborns**

Women with disabilities are less likely to receive maternal healthcare services compared to women without disabilities (Devkota et al., 2017). Recent UN evidence from five low- and middle-income countries<sup>6</sup> indicates that, on average, births from mothers with disabilities are slightly less likely to be attended by a SBA, than births from mothers without disabilities (71% versus 74%) (UN, 2019: 88).

Despite so much effort being placed on improved access to maternity health care, studies show that women with disabilities are being systemically excluded from the mainstream maternal health services (Mheta & Mashamba-Thompson, 2017). According to the *UN Flagship Report on Disability and Development 2018*, various countries have taken actions to address these challenges including through development of national policies and programmes on sexual and reproductive health that are inclusive of persons with disabilities (UN, 2019: 94). However, there remains insufficient collection and analysis of viable data and information on the situation of persons with disabilities regarding access to sexual and reproductive health services. Findings do suggest that although women with disabilities do want to receive institutional maternal healthcare, however, their disability often makes it difficult for them to travel to access skilled care (Ganle et al., 2016).

#### **What works: Inclusive programmes**

##### ***Kenya***

The NGO Humanity & Inclusion (also known as the Handicap International network, HI) and the Ministry of Health in Kenya partnered on a project to improve access to maternal and paediatric health care (UNFPA, 2018: 202). Although the project made progress, it became clear that women were not seeking care for themselves and their children, even where care was

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<sup>6</sup> Columbia, Gambia, the Maldives, Uganda, and Yemen.

accessible, because they did not have the financial means to pay for it. In response, HI launched a **complementary programme** designed to produce income for women with disabilities and parents of children with disabilities and increase their autonomy and ability to demand rights for themselves. This programme sponsors groups of participants in the development of revenue-generating businesses. In exchange, participants commit to visiting government health facilities at least once per month with their children so that the health of all can be monitored. Pregnant women also commit to seeking both ANC and PNC, and bringing their babies to health-care clinics to reduce the chance of potentially disabling complications both before and after birth.

**Impact:** The programme has made significant inroads into improving health outcomes for children with disabilities by tackling not only negative attitudes among health-care providers through training on inclusive care, but also ensuring that parents of children with disabilities have the means to travel to clinics with newly trained and responsive providers. It reflects a systemic response to a complex problem that can serve as a model for inclusive interventions (UNFPA, 2018: 202-203).

### **Nepal**

In coordination with the government of Nepal, the NGO Marie Stopes Nepal has promoted the **incorporation of disability-friendly services in existing youth-friendly service centres** and has developed information and materials in multiple accessible formats (UNFPA, 2018: 193). Young persons with disabilities have been recruited to act as 'pop-up volunteers' and peer educators to promote outreach to young persons with disabilities and encourage greater participation. According to a 2017 report, Marie Stopes Nepal has generated more than 100 interventions on behalf of young persons with disabilities since July 2015.

## **Displaced persons and those affected by crises**

A humanitarian crisis can be understood as '...a situation in which there is an exceptional and generalized threat to human life, health or subsistence.'<sup>7</sup> Significant reductions in maternal deaths in some countries (e.g. China, Egypt, Iran, Jordan, Maldives, Mongolia, Morocco, Peru, and Turkey) have been associated with increased availability of, and access to, basic and emergency obstetric care. This includes, but is not limited to, the following indicators: SBA; and the availability of caesarean section, penicillin, blood transfusion, and ANC (Prata, 2010). Many of these services are largely unavailable or overwhelmed in crisis settings.<sup>8</sup>

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<sup>7</sup> Francesch, M.C., Armengol, V.F., Amado, P.G., Chevalier, M.P., Aspa, J.M.R., García, J.U., et al. (2010). Alert 2010! Report on conflicts, human rights and peacebuilding. In: Icaria Editorial / Escola de Cultura de Pau, UAB editor(s). *Alert 2010!*. Barcelona: Escola de Cultura de Pau, UAB, 111. <http://escolapau.uab.cat/img/programas/alerta/alerta/alerta10i.pdf>

<sup>8</sup> Whilst populations in emergency/humanitarian settings could be used as a proxy, for the purposes of this work it is important to include interventions directed at them for analysis (so they will not be used as a proxy measure for the poorest populations).

## 1. What works: Creating 'Safe Spaces'/Maternity waiting homes

### **Bangladesh**

In the Cox's Bazar camp, where there are an estimated 316,000 women of reproductive age, 64,000 of which are pregnant,<sup>9</sup> the United Nations Population Fund (UNFPA) runs its *Women Friendly Spaces*. These are **safe spaces** that displaced women and girls (and those from the host community) have come to trust.

**Impact:** Women and girls are able to build their support networks, receive information (including on family planning and high-quality delivery services<sup>10</sup>), and connect with services. UNFPA is also supporting sexual and reproductive health services at 19 other facilities within and around the camp.

### **Somalia**

Located on Africa's easternmost coast, Somalia is among the least-developed countries listed in the Human Development Index. The country suffers from poverty, internal conflict, human rights violations, environmental degradation, and a broken healthcare system. Under these conditions, health is compromised. So far, maternal health in Somalia has been the most vulnerable. Access to maternal health services and antenatal care coverage remain low. Only about 26% of Somalis have ANC coverage, and the number of necessary emergency care facilities for obstetrics is 0.8 per 500,000 people.<sup>11</sup> This means the number of facilities is 4.2 facilities short of the international standard of five facilities per 500,000 people.

Although levels of maternal mortality remain unacceptably high, some efforts to improve maternal health in Somalia have succeeded. UNFPA methods to improve coverage and health service delivery for emergency obstetric care in Somalia were implemented in June of 2017. The UNFPA's efforts complement projects that provide health services for expectant mothers. One such example is **maternity waiting homes**, which offer women care and medical supervision at every stage of their pregnancy.

**Impact:** In 2013, 34 maternity waiting homes had been established in Somalia and by 2015, nearly 17,000 women had delivered in these residential facilities. An additional 1,300 were transported to facilities with the adequate infrastructure and clinical capacity to care for women with pregnancy and childbirth complications.<sup>12</sup>

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<sup>9</sup> <https://bangladesh.unfpa.org/en/news/japan-contributes-us-27-million-towards-unfpas-response-displaced-women-and-girls-rakhine>

<sup>10</sup> <https://www.unfpa.org/news/sexual-and-reproductive-health-needs-immense-among-rohingya-refugees>

<sup>11</sup> <http://www.emro.who.int/som/programmes/reproductive-health.html>

<sup>12</sup> <https://borgenproject.org/maternal-health-in-somalia/>

## 2. What works: Mobile clinics

### *Myanmar*

In Myanmar, which has the largest concentration of internally displaced people in Southeast Asia, local physicians and nurses operate **temporary and mobile clinics** in conflict-torn Rakhine State.

**Impact:** These clinics bring reproductive and maternal health services to women and adolescent girls “who did not have the freedom to safely move to stationary or government-run hospitals or clinics” (UNFPA, 2016).

## 3. What works: ‘Mama Taxis’

### *Kenya*

The northeast region is home to the Dadaab refugee camp. The area continues to face insecurity with sporadic acts of violence incited by ethnic differences and targeted attacks by extremist group Al-Shabaab (Keats et al., 2018). Dadaab camps are located in a phase III security situation, and UN Refugee Agency (UNHCR) vehicles are escorted by armed police to and from camps. Agency transportation from the refugee houses to hospitals is not possible at night. Consequently, many pregnant refugee women who may otherwise seek care in a health facility continue to deliver at home because of lack of means to access healthcare. To overcome this, UNHCR and its health partners introduced **community taxis** (“Mama Taxi”) which are hired from the local community. Drivers’ mobile cell numbers are distributed to the block leaders for any emergency occurring during the evening and nights.

**Impact:** This approach has greatly reduced delay in accessing care and increased the number of women seeking hospital care at night. In addition, women who are in the camp full-term and go to the health posts are encouraged to remain at the hospital in order to deliver there, even though labour may not yet have started.<sup>13</sup>

## Ethnic groups

Globally, no universal definition of Indigenous peoples has been accepted.<sup>14</sup> Evidence shows that there are disparities between acceptability and use of healthcare services between Indigenous people and the general population (Kilonzo et al., 2017). However, there is limited

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<sup>13</sup> <https://www.unhcr.org/4c247d969.pdf>

<sup>14</sup> Bartlett, J.G., Madariaga-Vignudo, L., O’Neil, J.D., & Kuhnlein, H.V. (2007). Identifying indigenous peoples for health research in a global context: a review of perspectives and challenges. *Int J Circumpolar Health*, 66(4):287-307.

evidence on successful programme approaches to correct this, especially in low- and middle-income countries:

### **What works: Midwifery Access programme**

#### ***Australia***

A greater proportion of Aboriginal and Torres Strait Islander babies are born preterm or with low-birthweight. They also experience higher foetal and perinatal death rates than non-Indigenous babies. Teenage pregnancy is a recognised risk factor for low-birthweight and preterm delivery, while advanced maternal age from 35 years is associated with an increased risk of pregnancy complications. Aboriginal and Torres Strait Islander women also access antenatal care less than non-Indigenous Australians, presenting later during pregnancy with fewer visits (Wong et al., 2011).

The Aboriginal Midwifery Access Programme (AMAP) was established in January 2001 at the Winnunga Nimmityjah Aboriginal Health Service. Winnunga is the only Aboriginal community-controlled health service providing comprehensive primary health care for the Australian Capital Territory (ACT) and surrounding regions. AMAP offers full antenatal care from the first presentation in pregnancy, including home visits, assistance with appointments for antenatal investigations and specialist care, transport, birth support, postnatal follow-up and immunisations. High-risk pregnancies are not excluded. AMAP midwives work closely with, and provide support for, hospital obstetricians, the Foetal Medicine Unit at The Canberra Hospital, Winnunga general practitioners and the Winnunga social health team. The AMAP staff includes two full-time midwives and a full-time Aboriginal access worker.

The AMAP was evaluated once in 2002. Outcome measures included maternal and baby characteristics, antenatal visits, behavioural risk factors and complications. This evaluation concluded that the program had taken positive steps in the areas of community acceptance, access to antenatal care and early presentation to antenatal care. More recent data on AMAP clients had not yet been analysed. Therefore, Wong et al. (2011) described the maternal and baby characteristics, pregnancy risk factors, access to antenatal care services and pregnancy complications of clients who used AMAP services in 2004–2008 and compare the characteristics of AMAP clients with other women giving birth in the ACT.

**Impact:** AMAP provides high-quality antenatal care in a trusted environment. Half (50.3%) of the Indigenous mothers presented in the first trimester, and 94.7% attended five or more antenatal visits (Wong et al., 2011).

## **3. Key MNH programmes: local community and national engagement**

Two large-scale approaches have been used to successfully improve MNH service use:

### **Maternal and Child Survival Programme (MCSP)**

The USAID MCSP is currently working in 27 countries (from 2015 to 2019): Burkina Faso, DRC, Egypt, Ethiopia, Ghana, Guatemala, Guinea, Haiti, India, Indonesia, Kenya, Laos (Lao PDR), Liberia, Madagascar, Malawi, Mali, Mozambique, Myanmar, Namibia, Nepal, Nigeria, Pakistan,

Rwanda, South Africa, Tanzania, Uganda, and Zambia. USAID's predecessor Maternal and Child Health Integrated Programme (MCHIP) continues to work in Bangladesh and Pakistan.

**10 Key Indicators:** Family planning need; 4+ ANC visits; SBA; early initiation of breastfeeding; Diphtheria-tetanus-pertussis (DTP3) immunisation coverage in children; sulfadoxine-pyrimethamine(SP)/Fansidar antimalarial in pregnancy (2+ dose); child care seeking for pneumonia; household washing source; not nutritionally stunted, and HIV testing in women.

Two country case examples demonstrate the impact of the programme:

### **Ghana**

Currently, women in Ghana have an average of 3.9 children (GSS, GHS & ICF, 2018: 3). The Ghana Health Service annual performance review is an evidence-based process to monitor health service delivery at all levels, starting at the district level. Through its **district-centred and inclusive approach**, the annual performance review process itself highlights innovations at district level in health service delivery, and helps to identify districts or regions in need of special attention (Ghana Health Service, 2017).

MCSP is improving health outcomes for HIV, malaria, nutrition, family planning and maternal, newborn and child health services in Ghana. It has built on work begun under USAID's predecessor flagship Maternal and Child Health Integrated Programme (MCHIP).<sup>15</sup>

**Impact:** Almost two-thirds of women (64%) had their first ANC visit in the first trimester, as recommended. Nine in ten women make four or more ANC visits. Since 2007, more women are attending four or more ANC visits, and ANC within their first trimester (GSS, GHS & ICF, 2018: 6).

Another case study example from UNICEF includes an intervention programme based on a review of evidence and by understanding community perspectives: this programme in the Shai Osudoku District was first implemented in July 2012, and is currently ongoing due to initial success. After a one-year implementation period, health records were reviewed to understand if the programme led to increases in facility deliveries.

**Impact:** Findings indicated major improvements in ANC registration, and use of delivery services at facilities (O'Connell et al., 2014: 26). This was due to use of **community outreach and engagement**, extending health services for remote communities, traditional/community birth assistant involvement, health staff training, incentives (both financial and non-financial), and performance reviews (O'Connell et al., 2014: 25-26).

### **Mozambique**

In this largely rural country, where health facilities can take over an hour's walk to reach, the rate of maternal deaths is high (408/100,000) and are related to complications from childbirth, HIV or malaria.

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<sup>15</sup> <https://www.mcsprogram.org/where-we-work/ghana/>

MCSP is also incorporating lessons learned from MCHIP, particularly those experiences gained through implementation of the national *Model Maternity Initiative*,<sup>16</sup> and family planning programming.

**Impact:** An **integrated referral network approach** is used - strengthening the Ministry of Health's leadership, planning and monitoring capabilities - to deliver high-impact interventions at various levels of health service delivery. The Programme also focuses on preventative and curative aspects of nutrition programming at **facility and community levels**, which is integrated into the reproductive, maternal, newborn and child health platform, as needed. MCSP is addressing inadequate infant and young child feeding practices and anaemia, and strengthening growth monitoring and referral / counter-referral systems. Through a **family-centred lifecycle approach**, they are working to increase both access to and utilisation of evidence-based interventions. The Programme is supporting a robust integrated community component targeting children under five, which includes nutrition as well as WASH (water, sanitation and health) work, to bridge the continuum of care from the facility to the community. This approach is inclusive of adolescents and gender transformative programming. To date, these efforts have reached 358,669 pregnant Mozambican women (Papelo et al., 2019).

## National self-care project

The White Ribbon Alliance (WRA)'s *Self-Care Project* is building the knowledge and skills of health workers so that they can provide consistent, quality and respectful care, allowing them to more effectively support pregnant women and their families in planning and preparing for a healthy pregnancy and childbirth, ultimately setting a national standard.

### **Bangladesh**

WRA Bangladesh's work with the Ministry of Health is enabling establishment of a nationwide standard for birth preparedness through self-care and women-centred practices. With self-care, the individual is the driver of their own health. By ensuring that women have the information and resources needed to proactively and effectively care for themselves and their families, positive ripple effects for the individual, family, community, provider and health system will be felt for generations.

**Impact:** By developing tools – like the rapid assessment checklist on the quality of services for maternal and newborn health and the Charter of Rights for maternal and newborn health services – and working with Parliamentarians to reinforce their responsibilities to the women in their constituencies, WRA Bangladesh has led the way on a national maternal health movement that is saving the lives of mothers and their children across Bangladesh.

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<sup>16</sup> The MMI started in 2008 and now includes nearly half of the 250 maternities in hospitals and health centres of the country. The MMI uses a standardization approach called Standards-based Management and Recognition (SBM-R). The MMI prioritizes 81 standards in 9 areas spanning from direct service delivery to managerial processes, teaching, and community involvement. The MMI has been a centre-piece of the MOH national MNH strategy, garnering critical political and technical leadership within the MOH and the highest levels of the Mozambican Government. <https://www.globalmnh2015.org/portfolio/the-national-model-maternity-initiative-in-mozambique/>

## 4. Improving skilled care workers: evidence from DFID priority countries

Training of healthcare workers has proven to be a successful sustainable approach for maternal health, as well as for the workers themselves:

### Maternal and Neonatal Health Initiative (MNHIB)

#### **Bangladesh**

With an objective of reducing disparities in maternal and neonatal mortality and morbidity, the Government of Bangladesh and United Nations launched *Maternal and Neonatal Health Initiatives in Bangladesh* (MNHIB) in 2007. The Government of Bangladesh, UNFPA, United Nations Children's Fund (UNICEF), and WHO have been working together in order to implement the programme. The poorest quintile is used.<sup>17</sup>

**Key Indicators:** ANC, delivery, PNC and care seeking for complications were selected as target indicators for investigating inequality in utilisation. Qualified doctor, nurse, paramedic, medical assistant, sub-assistant community medical officer, family welfare visitor, and community SBA were considered as medically trained provider for antenatal, delivery and postnatal, and obstetric complications care (Haider et al., 2018). Six maternal healthcare indicators were examined: received ANC at least four times during pregnancy, received ANC from a trained provider, delivery attended by a skilled health provider, delivery at a health facility, received PNC from a trained provider within 48 hours of the delivery, and received care for obstetric complications at a health facility or from a trained provider, if needed (Haider et al., 2018).

**Impact:** In comparison to contemporary Bangladesh Demographic Health Survey data in nearby districts, MNHIB was successful in reducing inequity in receiving ANC from a trained provider (CI: 0.337 and 0.272), institutional delivery (CI: 0.435 in 2008 to 0.362 in 2013), and delivery by skilled personnel (CI: 0.396 and 0.370) (Haider et al. (2018).

### Respectful Maternity Care (RMC) training

#### **Malawi**

There are only 3,420 individuals working mainly as midwives in the entire country of Malawi. This is dangerously below the WHO recommended ratio of one for every 175 women of reproductive age, the midwife shortage is a significant factor in its maternal and newborn health crisis.<sup>18</sup>

WRA Malawi was established in 2002 to support the reduction of maternal and newborn mortality, which was understood even then to be connected to the overall shortage of midwives. In 2013, WRA Malawi, through the USAID-funded Health Policy Project, launched *Happy Midwives for Happy and Healthy Mothers*, a campaign to draw attention to the poor status,

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<sup>17</sup> Wealth quintile: poorest, poorer, middle, richer, and richest.

<sup>18</sup> <https://www.whiteribbonalliance.org/malawi/>

inadequate numbers, and substandard working conditions of midwives and the impact on the provision of high-quality care.

**Impact:** All midwives who graduated in the last two years have been employed and ongoing training on *Respectful Maternity Care* is increasing the status of these essential health workers.

## **Zimbabwe**

Many women experience disrespect and abuse at health facilities and choose to deliver at home, putting themselves and their babies at risk of complications and death. Currently, 651 maternal deaths occur per 100,000 live births in Zimbabwe.<sup>19</sup>

WRA Zimbabwe is implementing *Respectful Maternity Care* and self-care programmes in the rural community of Kwekwe and working to imbed strong policies reinforcing both at the national level. The WRA Zimbabwe self-care project is a community-driven, women-centred effort to build health literacy for new and expecting mothers in the rural area of Kwekwe. This programme is laying the foundation for a national self-care strategy to promote healthy lifestyles for families while also realising health rights.

**Impact:** WRA Zimbabwe has trained more than 300 healthcare providers – ranging from nurses, midwives, senior-level managers and health centre committee members – in RMC, and by the end of 2016, had fully integrated RMC content into midwifery curriculum throughout the country. Currently WRA Zimbabwe is serving seven clinics, to motivate women and families for birth preparedness and complication readiness. More than 10,000 women and their families are expected to benefit from this training.

## **Use of technology**

Smart-phones, as well as automated voice message, interactive voice response (IVR) systems, or videos, can facilitate obtaining the instrumental and social support needed to sustain healthy behaviours or effective service delivery over time. As well as being used to inform mothers about pregnancy-related healthcare tasks, resources, or warning signs via text message, smart phones can be used to support the training of healthcare providers by using videos to model complex behaviours; other media can also be used to provide step-by-step instructions for new tasks (Rotheram-Boras et al., 2012).

## **DRC**

Accessing health facilities with basic emergency obstetric and neonatal care (BEmONC) capacity can take over two days by foot for some communities in North Kivu. Bolan et al. (2018) determined the feasibility, acceptability, and potential effect of the **Safe Delivery App** (SDA) on health workers' practices in basic emergency obstetric and newborn care (BEmONC). They found that use of the Safe Delivery App supported increased health worker knowledge and self-confidence in the management of obstetric and newborn emergencies after 3 months. Data from the 2014 Bangladesh Demographic and Health Survey were analysed and it was found

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<sup>19</sup> <https://www.whiteribbonalliance.org/zimbabwe/>

that 35.9% of deliveries were attended by SBAs, and 44.2% of those women received at least one antenatal check-up by a skilled provider (Al Kibria et al., 2017).

### **Pakistan**

WRA Pakistan is also working to highlight the issue of *Respectful Maternity Care (RMC)* by educating citizens, relevant policy makers and decision makers about its importance and seeking commitments to include RMC in policies. They are **engaging media** for wider awareness and understanding of the issue and leveraging the country's high mobile phone penetration to send messages to wide audiences in rural and urban areas.

## **Capacity building, including 'task-shifting' and innovative delivery**

Training of healthcare professionals, as well as improving infrastructure and supplying equipment, all contribute successfully to increasing access to MNH services:

### **Liberia**

With 1,072 maternal deaths for every 100,000 births, Liberia has one of the highest maternal mortality rates in the world, according to UNICEF.<sup>20</sup> The mortality rate of newborns, within the first 28 days of life, is also high: 37 for every 1,000 live births. In the remote areas, infrastructure and facilities in clinics are often lacking; midwives and health workers have to deliver babies without any electricity at night.

**Impact:** At present, the H6 Joint Programme on Health (formerly H4+) - a partnership that brings together six UN agencies working in collaboration with the Liberian Government - targets six of Liberia's fifteen counties - Maryland, Grand Kru, River Gee, Grand Capemount, Gbarpolu and River Cess - which are also among the most remote areas with high incidents of maternal and child mortality.<sup>21</sup> With the installation of solar lighting systems by UN Women and partners, conditions have improved in 26 clinics and five newly constructed maternal waiting rooms across Liberia.

As part of its efforts to improve maternal healthcare, UN Women, in partnership with Liberia's Ministry of Health, has also trained 115 health workers and clinic staff in the six counties on how to operate and maintain the solar systems. The solar lighting system, built to work under severe weather conditions and with proper maintenance, can last up to fifteen years.

To date, additional medical equipment, including X-ray machines and ventilators, have also been supplied to the clinics under the Joint Programme to aid with improving access to healthcare.

### **Sierra Leone**

After the Ebola outbreak, substantial initiatives have been taken to rebuild the Sierra Leonean health care system and its human resources. Central among those are the *Reproductive*,

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<sup>20</sup> <https://www.unicef.org/liberia/>

<sup>21</sup> <http://www.unwomen.org/en/news/stories/2017/7/feature-maternal-health-gets-a-new-boost-in-liberia>

*Maternal, Newborn, Child and Adolescent Health (RMNCAH) Strategy 2017-2021*, which is a priority area for the Government of Sierra Leone.

**Impact:** The strategy states the important of **task-sharing** as an approach to increase access to emergency obstetric services.<sup>22</sup> In West Africa, Sierra Leone has the highest maternal mortality ratio (MMR). Sierra Leone has an estimated MMR of 1,360 deaths per 100,000 births – the world’s fifth highest, which is in part due to lack of adequate surgical services. A cross-sectional survey was conducted in 2014 in 97 peripheral health facilities and three hospitals in Bombali District, Northern Region (Koroma et al., 2017). The quality of services was poor. Based on national standards, only 27% of women were examined, 2% were screened on their first antenatal visit and 47% received interventions as recommended. Although 94% of facilities provided delivery services, a minority had delivery rooms (40%), delivery kits (42%) or portable water (46%). SBAs supervised 35% of deliveries, and in only 35% of these were processes adequately documented. None of the five basic emergency obstetric care facilities were fully compliant with national standards, and the central and northernmost parts of the district had the least access to comprehensive emergency obstetric care.

In 2010, financial barriers were removed as an incentive for more women to use available antenatal, delivery and postnatal services. However, despite the availability of free healthcare, Sierra Leone continues to face significant challenges with respect to maternal and neonatal health (Sharkey et al., 2017). Few published studies have examined the quality of free antenatal services and access to emergency obstetric care in Sierra Leone (Koroma et al., 2017).

**Impact:** The CMNH has been working in partnership with the Ministry of Health and Sanitation (MoHS) in Sierra Leone since 2009 to improve maternal and newborn health through capacity building of healthcare providers.<sup>23</sup> Achievements to date include: updating resources required to sustain the in-service capacity building training approach, and replacing equipment in 100 training sites across the 14 districts.

## **Tanzania**

Between 2012 and 2015, CMNH implemented the *Making it Happen* (MiH) programme in Tanzania in the Kagera and Pwani regions. These two regions had relatively bad health indicators.

**Impact:** Through this programme, a reduction in stillbirth and an improvement in data collection and use in the target facilities was observed.<sup>24</sup> To date, all targets for the programme have been achieved. Staff from CMNH have made visits to the 44 target facilities every month for 12 months. Using a checklist for obstetric and newborn care key skills (developed by CMNH), they conducted skills assessment, identified gaps and provided refresher training in EmOC&NC. On average, this was delivered to 60 healthcare providers every month.

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<sup>22</sup> <https://capacare.org/wp-content/uploads/2016/12/CapaCare-Annual-Report-2017-3.pdf>

<sup>23</sup> <https://cmnh.lstmed.ac.uk/in-service-capacity-building-of-maternal-newborn-and-child-health-care-providers-in-sierra-leone>

<sup>24</sup> <https://cmnh.lstmed.ac.uk/quality-of-care-for-mothers-and-babies-in-tanzania>

Participants found the monthly visits for mentoring and supportive supervision to be very helpful. They also found the quality improvement approaches very useful; this included a structured way of reviewing both maternal and perinatal deaths with members from every department in the facility taking part in the process. At the end of the programme, CMNH handed over a full EmOC&NC training set to two health Midwifery training institutions.

## **Uganda**

In Uganda, 17 mothers and 106 newborns die every day due in part to inadequate Government investment in life-saving emergency obstetric and newborn care. However, successful programmes that have achieved relatively high levels of sustained coverage in Uganda have often started with a focus upon the specific interventions to be delivered, but then combined this with a set of **innovative delivery strategies** that address the various bottlenecks in the system.

**Impact:** Coverage of prevention of mother-to-child transmission of HIV (PMTCT, also known as prevention of vertical transmission) has now reached over 80% with the initial surge due to key inputs, such as increasing supply of HIV testing kits and recruitment and training of HIV-focused health workers. However, further gains required greater integration into the main maternal and child health programme delivered through the primary health care (PHC) system. Innovations in improving the functioning of the PHC system were therefore crucial for reaching the majority of affected women and children. Examples included intensive use of programme data to show district, facility and programme managers where drop outs were occurring; active engagement with civil society and communities especially to inform them of the service; focus upon supervision and mentorship of frontline workers; and some task sharing, especially for HIV testing and initiation of treatment (The Republic of Uganda, 2016: 21).

## **5. Lessons learned: what has worked**

It is difficult to piece together the characteristics of successful implementation based on the effectiveness studies (Smith et al., 2017). One clear finding is that implementation of interventions can be enhanced by using a **participatory approach**, including dialogue to ensure that the perspectives of women, families, communities, and providers are incorporated. Smith et al. (2017) state that there are several key characteristics policy makers should consider in implementing these interventions:

- **Socio-political support** and commitment is essential for success and sustainability of the health promotion interventions and for any participatory approaches that underlie them.
- **Health promotion approaches** to increase use of maternity care services should be implemented in combination for synergistic effects.
- **Include representation of all key community** (including disadvantaged) groups and ensure the voices of women and members of minority groups are not lost, so that participatory interventions do not simply reinforce harmful power imbalances.
- **Allocate appropriate time to engage participants** and develop collaborative relationships to improve health.

However, studies rarely provided information about sustainability, the material resources required for implementation, or the social relationships and histories of communities that might help or hinder participatory approaches (Smith et al., 2017).

The WHO's *Every Woman, Every Newborn* initiative, and large-scale efforts by organisations like the White Ribbon Alliance, have emphasised the importance of gaining the user's experience of MNH services as part of the drive to improve survival of women and newborns around the time of birth (Tancred et al., 2016). The suggested literature around perceived quality or client satisfaction from the WHO is dominated by surveys in clinical settings. Focus group discussions are mentioned occasionally, but the use of quantitative and qualitative measures together is not emphasised (Tancred et al., 2016).

In-service training alone is insufficient to improve service delivery (MCSP Zambia, 2016: 14). However, ANC with a skilled provider, which demonstrated high and equitable coverage, could be used as a unique platform to encourage the uptake of other critical interventions throughout pregnancy and childbirth (Keats et al., 2018). At a time when health equity is a global focus, some countries have the opportunity to be an example in accelerating progress in improving equality in RMNCAH services.

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## Key websites

- CapaCare - Medical education and training to increase the number of skilled staff at district hospitals: <https://capacare.org/>
- Making it Happen (MiH): <https://cmnh.lstmed.ac.uk/publications>

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## About this report

*This report is based on six days of desk-based research. The K4D research helpdesk provides rapid syntheses of a selection of recent relevant literature and international expert thinking in response to specific questions relating to international development. For any enquiries, contact [helpdesk@k4d.info](mailto:helpdesk@k4d.info).*

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