

Improving maternal and newborn health and survival and reducing stillbirth

Progress report 2023





Improving maternal and newborn health and survival and reducing stillbirth

Progress report 2023



Improving maternal and newborn health and survival and reducing stillbirth: progress report 2022

ISBN 978-92-4-007367-8 (electronic version)

ISBN 978-92-4-007368-5 (print version)

© World Health Organization 2023

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: “This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition”.

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (<http://www.wipo.int/amc/en/mediation/rules/>).

Suggested citation. Improving maternal and newborn health and survival and reducing stillbirth: progress report 2022. Geneva: World Health Organization; 2023. Licence: [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <https://www.who.int/publications/book-orders>. To submit requests for commercial use and queries on rights and licensing, see <https://www.who.int/copyright>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Design and layout: Annovi Design.

Contents

Acknowledgements	v
Acronyms	vi
Key definitions	vii
Background.....	1
Key findings.....	3
Preventable maternal deaths, stillbirths and newborn deaths remain extraordinarily high	3
Quality care for every pregnancy, at every birth: progress to meet the 2025 ENAP-EPMM coverage targets	5
ENAP target 4: Emergency care for small and/or sick newborns	7
EPMM target 4: Emergency care for pregnant women	9
EPMM target 5: Women to make their own informed decisions regarding their sexual and reproductive health	10
Next steps for coverage targets	11
What will it take to improve coverage with quality and equity to ultimately reduce mortality?.....	13
Investment and political commitment.....	13
Strengthening service delivery for quality and respectful care	14
Community engagement	14
Data and information systems.....	15
ENAP-EPMM Measurement Improvement Roadmap	17
1. List of priority indicators with a focus on ENAP-EPMM targets	17
2. Identify what to do now to improve data	18
3. Outline what to do next for improving measurement and use of data	18
Priority actions to reduce maternal deaths, stillbirths and newborn deaths.....	21
Conclusion	23
Bibliography.....	25
Annex A: Country Spotlights	26
A1. Increasing and supporting the health workforce to implement quality care in Sierra Leone ..	26
A2. Communities as partners in implementing quality MNH in Ghana	27
A3. Provision of MNH services during emergencies in Pakistan	28
A4. Institutionalizing MPDSR to improve the quality of MNH care in Nigeria	30
A5. Malawi's national assessment of SSNC and use of data to drive quality of care	31
A6. Engaging indigenous communities to address equity gaps in Guatemala.....	32
A7. Sustaining maternal and newborn health during conflict in Yemen	33



Acknowledgements

This is the first ever joint ENAP-EPMM progress tracking report which involved people across various organizations. The report development was a four step process that included revision of the existing ENAP tracking tool for joint progress tracking, data collection based on country self-reporting, analysis of data on ENAP-EPMM mortality and coverage targets, and development of the joint ENAP-EPMM progress report.

The revision of the ENAP-EPMM tracking tool was led by Gagan Gupta (UNICEF) and Allisyn Moran (WHO) along with a core group that included Olive Cocoman (WHO), Joy Lawn (LSHTM), Lily Kak (USAID), Hema Magge (BMGF) and Jean Pierre Monet (UNFPA). We also acknowledge the inputs of Elizabeth Katwan (WHO) and different ENAP subgroup leads for the related milestones: For investment, Alison Morgen (GFF); for quality of care, Blerta Maliqi, Martin Dohlsten (WHO) and Tedbabe Degefie Hailegebriel (UNICEF); for research and innovations, Steve Wall (Save the Children) and Robert Scherpbier (UNICEF); for response and resilience, Janet Meyers (Save the Children) and James McQuen Patterson (UNICEF); for medical commodities and technology, Rajesh Mehta (WHO) and Leah Greenspan (USAID); for accountability, Amy Boldosser-Boesch Management Sciences for Health, Susannah Leisher (University of Utah) and Angela Nkugu (White Ribbon Alliance Kenya).

Data collection for the ENAP-EPMM Joint Tracking Tool was coordinated by UNICEF regional and country offices working closely with WHO, UNFPA and other partners at regional and country level. Oversight and coordination for this was done by Gagan Gupta and Minjoon Kim (UNICEF). Facilitation at regional level was done by Asheber Gaym (UNICEF-ROSA), Tomomi Kitamura (UNICEF- WCARO), Fatima Gohar (UNICEF-ESARO), Maaiké Arts (UNICEF-LACRO), Fakhriddin Nizamov (UNICEF-ECARO), Salwa AlEryani (UNICEF-EAPRO), Shirley Mark Prabhu (UNICEF-MENA).

Report writing was by Alyssa Sharkey (WHO consultant) under guidance of Allisyn Moran (WHO), Gagan Gupta (UNICEF), Joy Lawn (LSHTM) and Jean Pierre Monet (UNFPA). We acknowledge Danzhen You, Yang Liu, Lucia Hug, David Sharrow (UNICEF), Jenny Creswell and Lale Say (WHO) for leading the mortality analysis, Liliana Carvajal-Velez, Samuel Chakwera, Dee Wang, and Emma Sacks (UNICEF) for the coverage analysis, Mengjia Liang (UNFPA) for the distal determinants analysis, Olive Cocoman and Uzma Syed (WHO) for country case studies, and Harriet Ruysen for the ENAP-EPMM measurement improvement roadmap.

We acknowledge the ENAP-EPMM management group co-chairs Anshu Banerjee (WHO), Luwei Pearson (UNICEF), Willibald Zeck (UNFPA) for their leadership for aligning ENAP and EPMM and overall guidance to the program. We are also grateful to Jeffrey Smith and Kate Somers (BMGF) for their support during the entire process. We sincerely acknowledge the country governments and Ministry focal points from 106 countries that reported into the ENAP-EPMM progress tracking tool which helped to reach the highest ever reporting numbers since the beginning of the progress tracking.

Acronyms

ANC	antenatal care
ANC4	at least four antenatal care visits
ARR	average annual rate of reduction
CHMCs	Community Health Management Committees
CHPS	Community-Based Health Planning Services
CPAP	continuous positive airway pressure
CRVS	Civil Registration Vital Statistics
DHS	Demographic and Health Surveys (DHS)
EmOC	Emergency Obstetric Care (EmOC)
ENAP	Every Newborn Action Plan
EPMM	Ending Preventable Maternal Mortality
LBW	low birth weight
MICS	Multiple Indicator Cluster Surveys
MNH	maternal and newborn health
MOH	Ministry of Health
MMR	maternal mortality ratio
MNCH	maternal, newborn and child health
MPDSR	maternal and perinatal death surveillance and response system
NMR	neonatal mortality rate
PNC	postnatal care
QI	quality improvement
QOC	quality of care
RMNCAH	reproductive, maternal, newborn, child and adolescent health
RMNCAH-N	reproductive, maternal, newborn, child and adolescent health plus nutrition
RHIS	routine health information systems
SAB	skilled attendant at birth
SBR	stillbirth rate
SDG	Sustainable Development Goal
SGA	small for gestational age
SSNC	small and sick newborn care
TBA	traditional birth attendant
TWC	Technical Working Group
UHC	universal health coverage
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Key definitions

Antenatal care four visits (ANC4)	Percentage of women (age 15-19 and 15-49) attended at least four times during pregnancy by any provider.
Low birth weight	Weight under 2500 grams at birth, irrespective of gestational age.
Maternal morbidity	Any health condition attributed to and/or complicating pregnancy and childbirth that has a negative impact on the woman's well-being and/or functioning.
Maternal mortality	The death of a woman while pregnant or within 42 days of the end of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.
Maternal mortality ratio (MMR)	The number of maternal deaths during a given time period per 100 000 live births during the same time period.
Newborn death	A death within the first 28 days after birth of any live-born baby regardless of weight or gestational age.
Postnatal care (Maternal)	Percentage of women (age 15-19 and 15-49) who received postnatal care; i.e., a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after birth.
Postnatal care (Newborn)	Percentage of newborns who received a postnatal contact with a health provider within 2 days of delivery; i.e., a health check while in facility or at home following delivery, or a postnatal care visit within 2 days after delivery.
Preterm birth	A baby born alive before 37 weeks of pregnancy are completed.
Skilled attendant at birth (SAB)	Percentage of deliveries attended by skilled health personnel (typically a doctor, nurse or midwife).
Small for gestational age (SGA)	Fetuses or newborns below the 10th percentile of birth weight for their gestational age. An SGA baby may be preterm or full-term.
Stillbirth	A baby born with no signs of life at 22 or more completed weeks of gestation. For international comparisons, 28 or more completed weeks of gestation is used.
Universal health coverage	All people receiving quality health services that meet their needs without being exposed to financial hardship in paying for the services.



Background

In 2014, at the sixty-seventh World Health Assembly, 194 Member States endorsed *Every newborn: an action plan to end preventable deaths* (ENAP) (Resolution WHA67.10) (1), a roadmap of strategic actions to end preventable neonatal mortality and stillbirths while also contributing to a reduction in maternal mortality and morbidity. That same year the World Health Organization (WHO) released a consensus statement on *Targets and strategies for ending preventable maternal mortality* (EPMM) (2), followed by a full strategy paper in 2015 (3), endorsed by the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), the World Bank Group, the United States Agency for International Development (USAID) and a number of international professional organizations and maternal health programmes.

In 2020, ENAP's 2025 coverage targets were established for global, national and subnational levels. These include: 1. at least four antenatal care (ANC) contacts, 2. skilled health personnel attending every birth, 3. postnatal care (PNC) within two days and 4. care for both small and sick newborns (4). In 2021, EPMM developed coverage targets to align with ENAP as well as to promote access and availability to emergency maternal care as well as the broader social determinants of maternal mortality. The linked fourth target includes population covered by Emergency Obstetric Care (EmOC) health facilities within two hours of travel time, while a fifth target documents the proportion of women aged 15-49 years who make their own informed and empowered decisions regarding sexual relations, contraceptive use, and reproductive health care (5). Common milestones were established to support country implementation progress towards reaching these aligned ENAP-EPMM targets.

At this midpoint of the Sustainable Development Goal (SDG) era, renewed focus and action to end preventable maternal deaths, newborn deaths and stillbirths – which share many common risk factors, causes and solutions – are critical to align global partnerships and investments to accelerate subnational efforts and progress at country level. Such alignment will stimulate greater efficiency and effectiveness for governments and their partners and, most importantly, better outcomes for families.

Box 1: Global targets for maternal mortality, newborn mortality and stillbirths

Maternal mortality: By 2030, reduce the global maternal mortality ratio (MMR) to less than 70 per 100 000 live births (SDG Target 3.1)

Newborn mortality: By 2030, end preventable deaths of newborns and children under five years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1 000 live births and under-5 mortality to at least as low as 25 per 1 000 live births (SDG Target 3.2)

Stillbirths: By 2030, reach 12 or fewer stillbirths per 1000 total births in all countries and continue to close equity gaps (ENAP Goal 2)

Together for Change: For Every Pregnant Woman, Every Mother, Every Newborn highlights global progress on maternal mortality, neonatal mortality and stillbirths, as well as country efforts to meet the global targets for all three of these critical challenges (Box 1). Using data from recently published analyses on maternal mortality (6), stillbirths (7) and neonatal mortality (8), as well as new data on country progress towards the ENAP-EPMM coverage targets and milestones,^a this summary report presents the key findings from the data and priority actions.

a. In 2022, the *Every Newborn Action Plan (ENAP) and Ending Preventable Maternal Mortality (EPMM) Joint Country Implementation Tracking Tool* was created, with key deliverables for each of the 10 milestones for maternal and newborn health and preventing stillbirths. A total of 88 questions were included using an online platform. National government staff self-reported into an online version of the tool between October and December 2022 with the support of UNICEF regional and country offices and other UN agencies including WHO and UNFPA.



Key findings

Preventable maternal deaths, stillbirths and newborn deaths remain extraordinarily high

The latest published estimates show there were a combined 4.5 million deaths: maternal deaths (0.29 million), stillbirths (1.9 million) and newborn deaths (2.3 million) (6,7,8). Sub-Saharan Africa and Central and Southern Asia are the regions experiencing the largest numbers of deaths, although across all regions, there is variation regarding the pace at which countries are progressing in their efforts to achieve the global 2030 targets. The top 10 countries with the highest burden (table 1) account for 60% of global maternal deaths, stillbirths, and newborn deaths, and 51% of the world's live births.

Countries classified as fragile states (9) continue to have significant burdens of preventable deaths among pregnant women, mothers and newborns, and stillbirths. In fact, 10 fragile countries alone account for 659 000 of global maternal deaths, stillbirths and

neonatal deaths (14% of the global total).^b In these countries, the average annual rate of reduction (ARR) will need to be among the highest to achieve the global targets (figure 1). Eight of these 10 countries (all except Myanmar and the Syrian Arab Republic) are among the top 20 countries requiring the highest average ARR to meet the ENAP 2030 stillbirth rate (SBR) target. They are also among the 25 countries requiring the highest average ARR to meet the SDG 2030 target rate for neonatal mortality.

Trend data reveal global progress in reducing maternal and newborn deaths and stillbirths has slowed during the last decade. Gains made between 2000 and 2010 were faster than they have been in the years since 2010. It is critical to determine the reasons for this slowed pace, and take action to address them. Global challenges posed by the COVID-19 pandemic, climate change, conflicts and other emergencies, as well as cost of living increases within countries have the potential to further slow progress in this decade, warranting greater urgency and investment towards maternal and newborn health targets.

Table 1: Countries with the largest numbers of deaths in 2020

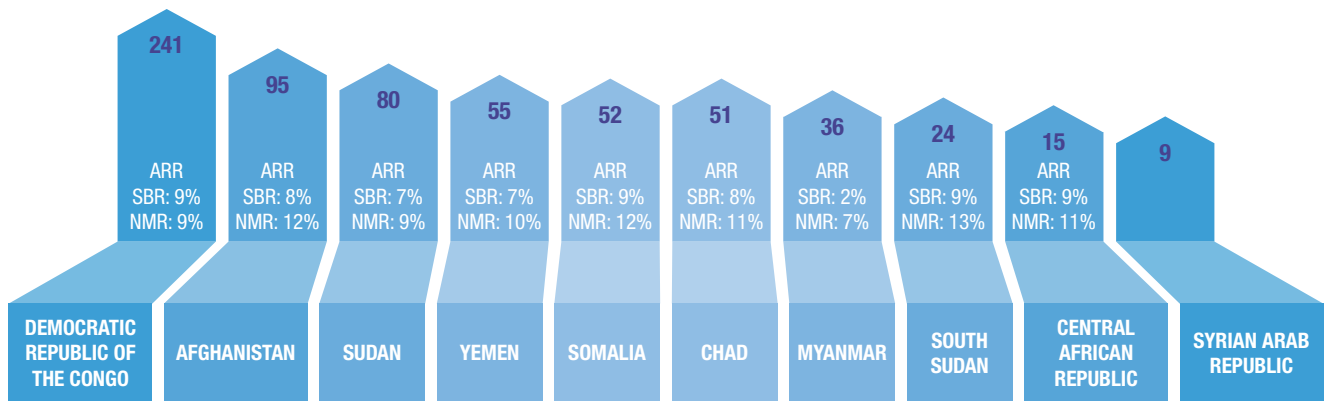
Country	Total maternal deaths, stillbirths and neonatal deaths (thousands)	Share of total maternal deaths, stillbirths and neonatal deaths	Share of total live births	Maternal deaths (thousands)	Stillbirths (thousands)	Neonatal deaths (thousands)
India	788	17%	17%	24	297	468
Nigeria	540	12%	6%	82	181	277
Pakistan	474	10%	5%	10	207	257
Democratic Republic of the Congo	241	5%	3%	22	113	106
Ethiopia	196	4%	3%	10	83	104
Bangladesh	121	3%	2%	4	66	51
China	108	2%	9%	3	63	42
Indonesia	103	2%	3%	8	42	53
Afghanistan	95	2%	1%	9	38	49
United Republic of Tanzania	94	2%	2%	5	43	46

Note: Total maternal deaths, stillbirths and neonatal deaths were calculated from unrounded numbers.

Sources: Estimates for live births come from United Nations, Department of Economic and Social Affairs, Population Division (2022). *World Population Prospects 2022* (<https://population.un.org/wpp/>). Estimates of maternal deaths were generated by the United Nations Maternal Mortality Estimation Inter-Agency Group (MMEIG) in 2023. Estimates of stillbirths and neonatal deaths were generated by the United Nations Inter-Agency Group for Child Mortality Estimation (UN IGME) in 2023.

b. These 10 countries are Afghanistan, Chad, the Central African Republic, the Democratic Republic of Congo, Myanmar, Somalia, South Sudan, Sudan, the Syrian Arab Republic and the Republic of Yemen.

Figure 1: Number of total stillbirths and neonatal deaths (in thousands) in 2020 for the 10 most fragile countries, and required average ARR (%) to meet the ENAP target for SBR and SDG target for NMR^c



Note: For Syria, SBR and NMR are already below target so no required average ARRs are displayed in figure 1. However, given the crisis in the country, further assessments may be needed to maintain this status or to have further mortality declines.

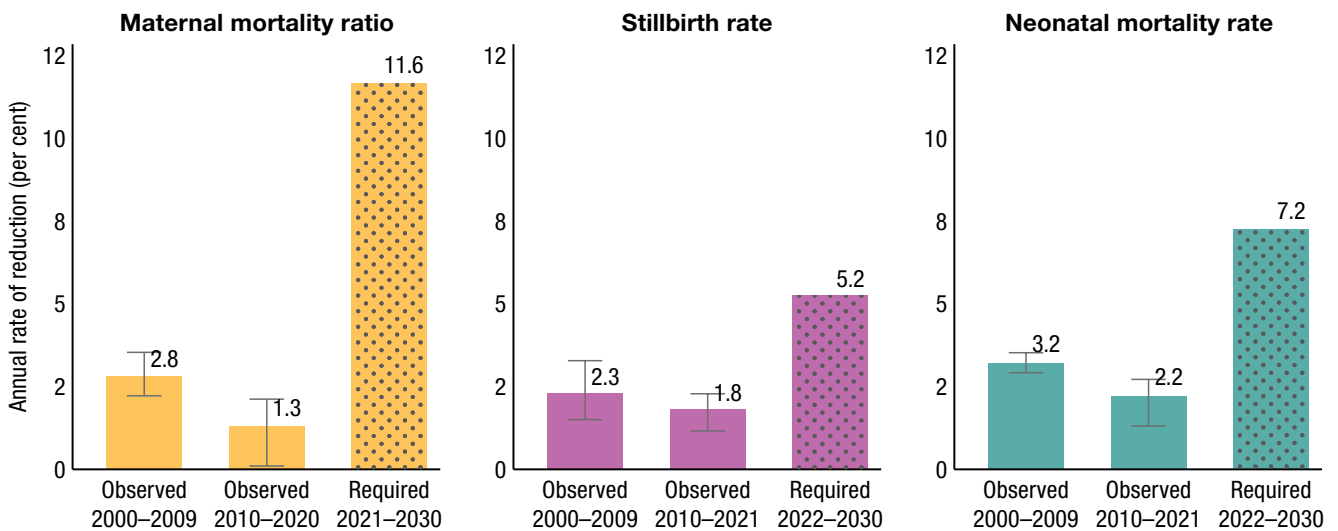
Source: Estimates for SBR, NMR and the number of stillbirths and neonatal deaths were generated by the United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) in 2023.

Projections indicate the need to accelerate progress to achieve an average ARR of 11.6% for the maternal mortality ratio (MMR), 5.2% for the SBR, and 7.2% for the neonatal mortality rate (NMR) in order to meet the targets (figure 2).

The burden of deaths is alarming, but there is hope for progress and opportunities for impact. If the SDG,

ENAP and EPMM targets are met, there is the potential to save at least 7.8 million lives (over 1 million women, 2.6 million stillbirths, and 4.2 million newborns) by the end of this decade. Saving these 7.8 million lives will only be possible with high coverage of life-saving interventions combined with quality and equity across the continuum of care, from pre-conception to the postnatal period.

Figure 2: Average annual rate of reduction (ARR) observed in MMR, SBR and NMR globally (2000–2009, 2010–2020/2021) and average ARR required in 2021/2022–2030, to meet global targets^d



Source: MMR estimates were generated by the United Nations Maternal Mortality Estimation Inter-Agency Group (MMEIG) in 2023. SBR and NMR estimates were generated by the United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) in 2023.

c. The size shown for each country is scaled to both the absolute number of deaths and the relative percentage of the global total.

d. Average ARRs have been calculated based on published values and may differ slightly to those published elsewhere for individual countries.

Quality care for every pregnancy, at every birth: progress to meet the 2025 ENAP-EPMM coverage targets

Coverage of essential health services; such as having at least 4 antenatal care contacts (ANC4), having a skilled attendant at birth (SAB) and receiving postnatal care within the first 2 days after birth (PNC); is critical to help prevent and manage complications that may arise during pregnancy, birth and postnatally, as well as to reduce maternal and newborn morbidity, mortality and stillbirths.




ENAP and EPMM, with country governments, have established population coverage targets for each of these critical high impact packages of care. They have agreed on targets and milestones through consultations with multiple stakeholders and partners at national, regional and global levels (figure 3). These targets were based on evidence and aimed to support integration and alignment with other maternal health, early childhood development and nutrition programmes.

In addition to global targets, EPMM and ENAP set national and subnational targets. These are particularly

important because national averages can mask wide intra-country disparity. Disaggregating data to subnational levels can reveal specific areas with low coverage, enables the identification of vulnerable populations, and facilitates evidenced-based policy making to address gaps and improve health outcomes.

Unfortunately, as was true for the global mortality targets, it is unlikely that global targets will be met for any of the joint ENAP-EPMM population-based coverage indicators without considerable action and investments (figure 4). The projection of 69% falls short of the 90% target for four ANC visits and 88% is just under the global target of 90% of births assisted by a skilled attendant.^e The women not accessing care when delivering their babies are likely the hardest to reach, geographically, politically, and culturally (box 2). While there have been improvements in coverage of maternal PNC, there is more to be done. Current projections show PNC targets will not be reached, as the improvement to 70% of women receiving early PNC is still below the global goal of 80%. Upward trends are promising, but rates of improvement to increase coverage must accelerate if 2025 targets are to be achieved. Further, even when pregnant women, new mothers and newborns have access to services, ensuring they benefit from respectful and quality care remains a critical gap.

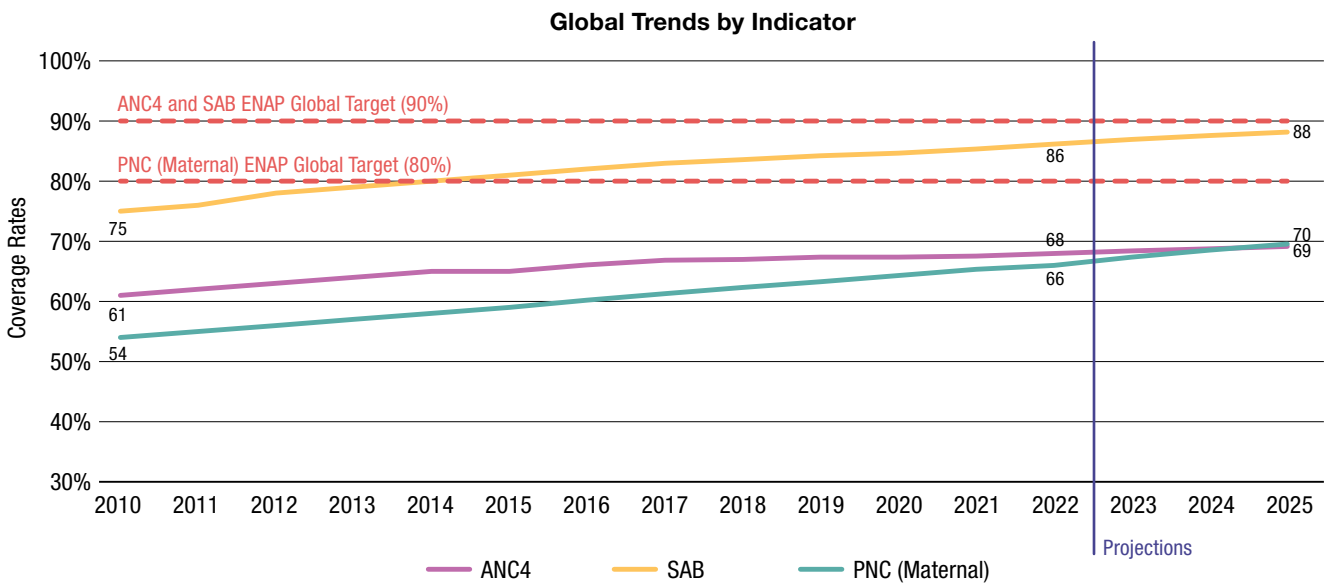
Figure 3: EPMM and ENAP coverage targets – 90/90/80/80 – and milestones

ENAP-EPMM Shared Targets (90/90/80/80)	Every Newborn Action Plan (ENAP)	Ending Preventable Maternal Mortality (EPMM)
<p> Target 1 (global): 90% coverage of four or more antenatal care contacts</p> <p> Target 2 (global): 90% births attended by skilled birth attendants</p> <p> Target 3 (global): 80% early routine postnatal care (within 2 days)</p> <p>Sub-national: 80% of districts with at least 70% ANC4, 80% SBA, and 60% PNC coverage</p>	<p>Target 4 (global): National implementation plan for inpatient units and sub-national inpatient unit (Level 2 plus CPAP)</p> <p>Sub-national: 80% of districts with at least one Level 2 inpatient unit plus CPAP</p>	<p>Target 4 (global): More than half of population within 2 hours of emergency obstetric care</p> <p>Sub-national: 80% of districts with at least half of population within 2 hours of emergency obstetric care</p> <p>Target 5 (global): 65% of women making own informed empowered decisions</p> <p>Sub-national: 80% of districts with more than half of women making own informed empowered decisions</p>
<p>Shared Milestones</p> <ol style="list-style-type: none"> 1. Policies and plans 2. Quality of care 3. Equity 	<ol style="list-style-type: none"> 4. Data for action 5. Investment 6. Health workforce 	<ol style="list-style-type: none"> 7. Response and resilience 8. Medical products/commodities 9. Accountability 10. Research, innovation, knowledge translation

Note: EPMM Target 4 Global is aiming at 60% of the population covered and EPMM Target 5 is aiming at 65%

e. The Thirteenth General Programme of Work (GPW 13) (<https://www.who.int/about/what-we-do/thirteenth-general-programme-of-work-2019---2023>) defines WHO's strategy for the five-year period, 2019-2023, and includes targets for Universal Health Coverage (UHC), including four or more antenatal care contacts (ANC4). The specific target is to achieve 95% coverage of ANC4 or more by 2030, which is consistent with the ENAP-EPMM target of 90% coverage of ANC4 or more by 2025.

Figure 4: Global trends for ENAP-EPMM coverage targets: ANC (4+ visits), SAB and PNC for mothers and newborns, with projections to 2025 based on current trends



Note: ANC4 = at least 4 antenatal care contacts, SAB = skilled attendant at birth, PNC (Maternal) = mothers receiving postnatal care within the first 2 days after giving birth. Source: UNICEF analysis based on country reported data (household surveys, primarily DHS and MICS, and administrative data).

Every SDG region has shown at least slight improvement in increasing coverage of at least four ANC visits, although two regions remain far below the 90% global target: sub-Saharan Africa (54%) and Central and Southern Asia (58%). Only Europe and Northern America and Latin America and the Caribbean have 90% or higher coverage of women receiving four or more ANC visits. The disparity is stark when comparing the average coverage of countries progressing fast towards the 2025 target versus countries progressing slowly. In fast progressing countries, ANC4 coverage was 74% in 2022 (although only projected to rise to 75%), but in slow progressing countries, coverage was just 52% in 2022 and only projected to rise to 53% in 2025.^f

Similarly, although disparities remain, improvements in coverage of SAB have been made in every region since 2010. The estimates for 2022 and projections for 2025 suggest sub-Saharan Africa will not reach the global target of 90%. Oceania is another region falling behind: 15% of births are still not attended by a skilled provider.

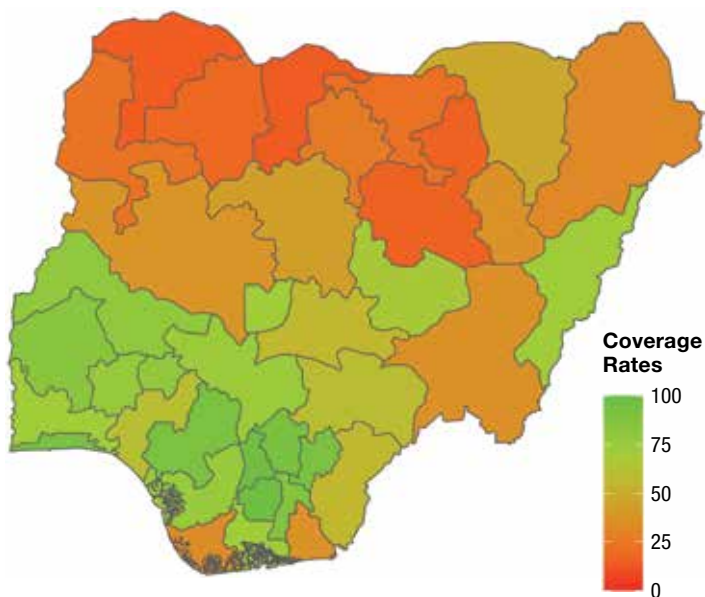
Slow progressing and fast progressing countries reveal stark disparities. In fast progressing countries, 95% of births occurred with a skilled provider in 2022, and this is projected to increase to 97% by 2025. However, slow progressing countries had only 70% coverage on average in 2022, which is only projected to increase to 75% by 2025.

Both newborns and women are extremely vulnerable in the hours and days after birth and therefore routine early PNC and hospital services for small and sick newborns are crucial. Of the regions with sufficient population coverage data, only Latin America and the Caribbean (89% in 2022) reached the goal of 80% of mothers receiving PNC. Northern Africa and Western Asia (71%), Central and Southern Asia (66%), and sub-Saharan Africa (59%) are below the target and not projected to achieve the global target by 2025. When separating fast progressing and low progressing countries, of those with available data, neither group achieved the global target in 2022 nor is projected to by 2025. Slow progressing countries are actually projected to improve slightly more than the fast progressing countries in PNC coverage by 2025. Having reached the PNC target for women should not stop individual countries from improving coverage, especially where sub-national inequities or poorer outcomes among highly vulnerable groups exist that are masked by national averages. The lack of population coverage data available in many regions illustrates the need for more complete data on postnatal care.

Nigeria provides an interesting case study to illustrate how attention to subnational disparities in coverage can help identify areas needing targeted focus. The country's subnational goal is for 80% of states to meet the target of 80% of deliveries benefitting from SAB. However, Nigeria's equity gap remains incredibly wide: in 2022, only 22% of states in the country met the target.

^f Countries that have either already reached the global targets for MMR, SBR and NMR or are expected to reach these targets by 2025 are referred to as fast progressing. Countries identified as being off-track to reach these global targets by 2025 are referred to as slow progressing.

Figure 5: Coverage of skilled attendance at birth (SAB) by state, Nigeria, 2022



Source: UNICEF analysis based on country reported data (household survey and administrative data).

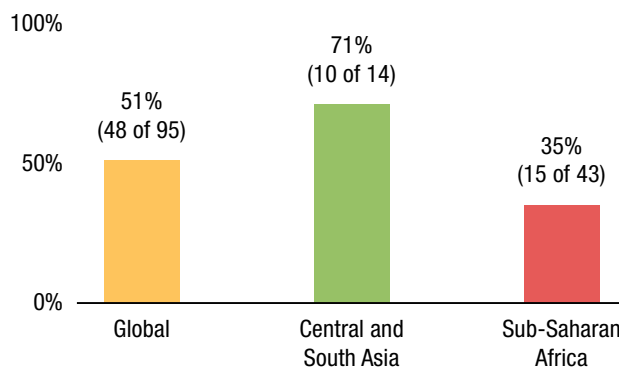
As illustrated in figure 5, coverage in Imo state is over 95%, while coverage in Bauchi, Sokoto, Kitsina, and Zamfara states is below 20%.

ENAP target 4: Emergency care for small and/or sick newborns

ENAP target 4 aims to ensure that 80% of districts (or an equivalent subnational unit) in every country have at least one level 2 newborn care unit, including continuous positive airway pressure (CPAP). SDG target 3.2 for a NMR of less than 12 per 1000 live births cannot be met without this capacity. If all countries achieved care for small and sick newborns with quality, over 740 000 lives could be saved every year. However, tracking of progress on this target through the *ENAP-EPMM Joint Tracking Tool* across 106 countries shows major gaps in planning and implementation.

Only half of the countries that reported on this target (48 out of 95) planned for coverage of 80% or more districts by 2025, with the rest having a lower level of ambition (figure 6). At regional level, there is marked difference in the level of ambition between sub-Saharan Africa and Central and South Asia, the two regions accounting for the biggest burden of newborn deaths.

Figure 6: Countries with small and sick newborn care units planned in 80% or more districts by 2025



Source: ENAP-EPMM Joint Tracking Tool analysis, 2023. Countries missing data in the Tracking Tool have been excluded.

In Central and South Asia, 71% of countries (10 out of 14) have planned for coverage in 80% or more districts, while in sub-Saharan Africa, only 35% of countries (15 out of 43) have set this target.

In terms of reported implementation, only 32% of countries (29 of 92) reported that they have functional small and sick newborn care (SSNC) units in at least 80% of districts (table 2), whilst 14 countries provided no data. The gap between regions is also evident in implementation with only 9% (4 of 43) of sub-Saharan Africa countries reporting they have achieved 80% functionality at district level, versus 57% (8 of 14) for Central and South Asia.

This progress is based on self-reporting by countries and is limited by the lack of an assessment tool at country level to measure service readiness (only 36% of countries report having such a tool).

Table 2: Current implementation of level 2 SSNC^g

	Number of countries reporting	Countries with level 2 newborn care units in 80% or more districts
Global	92	29 (32%)
Sub Saharan Africa	43	4 (9%)
Central and South Asia	14	8 (57%)

Source: ENAP-EPMM Joint Tracking Tool analysis, 2023. Countries missing data in the Tracking Tool have been excluded.

g. Denominators include only those countries that responded to the specific question(s) in the Joint ENAP-EPMM Tracking Tool (i.e., countries missing data have been excluded).

In December 2021, WHO and UNICEF organized a global consultation to build consensus on 10 core components for scale up of small and sick newborn care which can be adapted to country contexts. These components align with the WHO health system building blocks and quality of care framework (figure 7).

The *ENAP-EPMM Joint Tracking Tool* assessed self-reported progress for these ten core components using tracer questions. As shown in figure 8, progress is variable with major gaps in planning, budgeting, standardization of designs and human resource norms, digitalization of data, family involvement in care and follow-up care after discharge.

Accelerating progress towards the 2025 target of 80% district coverage: Moving forward, elevating the level of ambition in planning, and aligning it with the coverage target of 80% or more districts is essential for countries to reach the SDG target 3.2 for neonatal survival.

Crucially, this target requires more investment especially in infrastructure, human resources and devices, plus active use of the right data to drive both coverage and quality.

The countries achieving scale up have done it with strong political and technical leadership, long-term vision and financial commitment matched by an emphasis on subnational implementation and the ability to adapt based on implementation learnings. Partnerships with professional organizations, academic institutions and development partners can help bridge critical gaps in implementation especially if there are standard tools such as national floor plans and agreed device lists. Finally, accelerating district level scale up will require simultaneous work on each of the ten core components, thereby reducing the time lag from pilot to scale up and moving the needle on implementation.

Figure 7: Ten core components of WHO-UNICEF model for small and sick newborn care for country adaptation

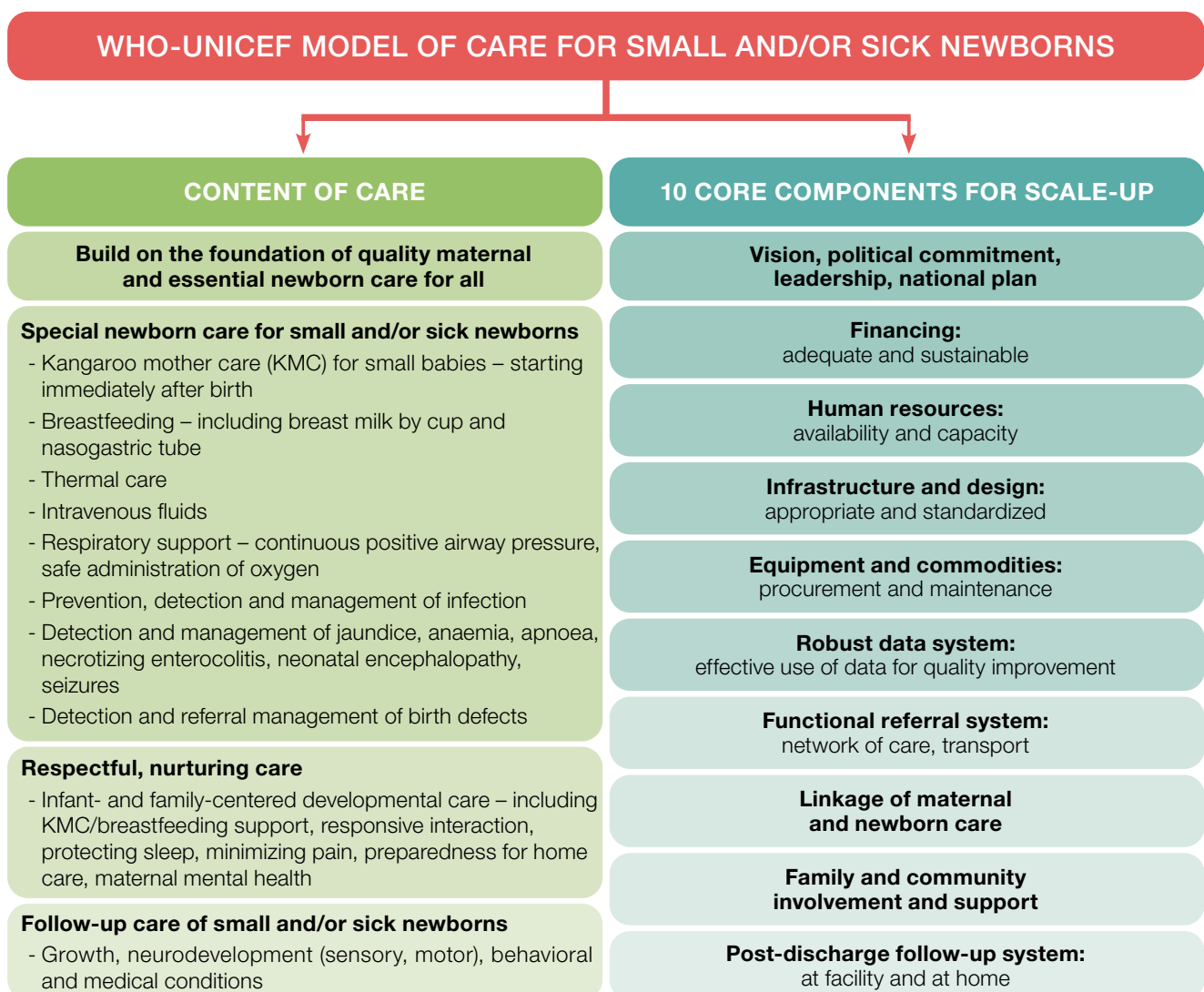
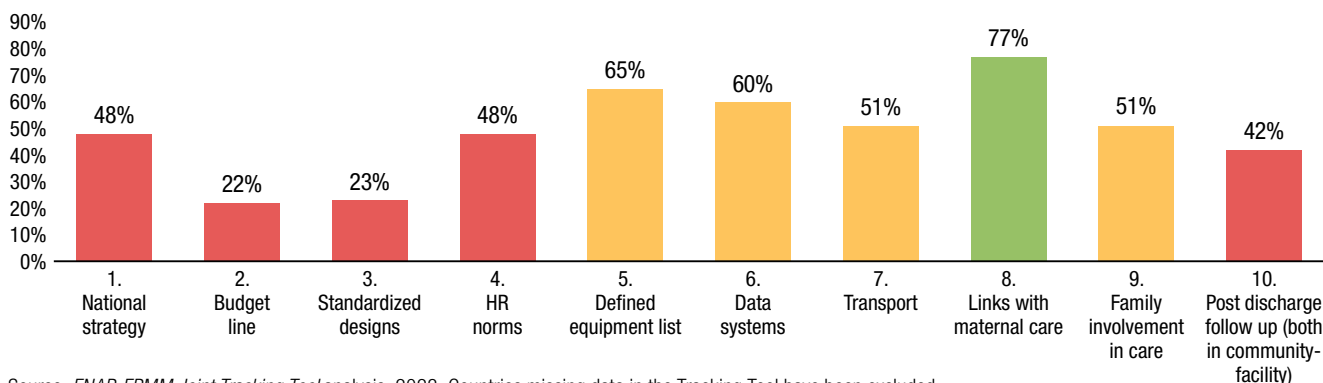


Figure 8: Progress across 10 core components needed for scale up of SSNC



Source: ENAP-EPMM Joint Tracking Tool analysis, 2023. Countries missing data in the Tracking Tool have been excluded.

Note: N=105 for data systems, family involvement, links with maternal care, transport and follow-up care. N=104 for national strategy, budget lines and HR norms. N=103 for standardized designs and floor plans.

EPMM target 4: Emergency care for pregnant women

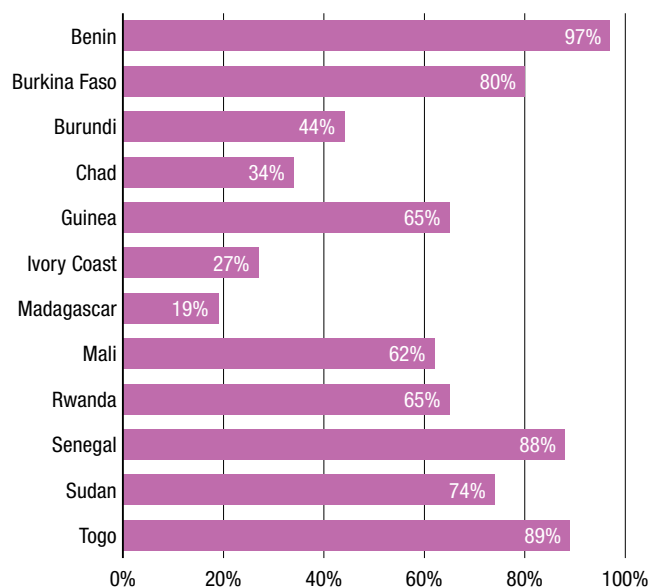
EPMM target 4 aims to support countries to ensure that every pregnant woman has timely access to a health facility able to provide quality emergency obstetric care (EmOC). Given that maternal mortality remained stagnant or increased in many regions in 2020 (6) and an estimated 45% of all stillbirths occurred during labour in 2021,^h access to high-quality care during childbirth, including ongoing intrapartum monitoring and timely intervention in case of complications, is essential.

A maximum travel time of two hours from home to a functioning EmOC health facility is used as a proxy measure for timely access as it is considered to be the maximum average time between onset of untreated severe postpartum haemorrhage (the leading cause of maternal death) and death (10). Based on their context, countries are encouraged to ensure that women can physically access the closest functioning EmOC health facility (providing critical clinical interventions, 24 hours/day, 7 days/week) (11) within 30 minutes or one hour of travel time.

Data from the ENAP-EPMM Tracking Tool (for 62 countries) reveal gaps in the functionality of EmOC facilities, particularly in slow progressing countries. Regional disparities exist as well with only about 36% of facilities providing EmOC in sub-Saharan Africa considered functioning versus 62% in Northern Africa and Western Asia and more than 80% of EmOC facilities in other regions. Data also reveal that many countries have a high number of health facilities identified to provide EmOC but not necessarily the dedicated budget to support them.

By 2023, 12 countries in sub-Saharan Africa had used data on the functionality of EmOC health facilities and geographic analysis to report on EPMM target 4 at the national level (figure 9). The overall physical access of the population within two hours of travel time across these 12 countries is 59%, close to the minimum threshold of the global EPMM target of at least 60%. When physical access to the closest functioning EmOC facility is measured with a maximum time of one hour, accessibility coverage is reduced to 37%.

Figure 9: Proportion of the population with physical access to the closest functioning EmOC health facility within two hours of travel time



Source: Source: United Nations Population Fund, University of Geneva, 2023.

h. United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) 2023.

Two-thirds of these countries (8 out of 12) achieved the national target of at least 50% of the population able to physically access the closest EmOC health facility within two hours of travel time.

At the subnational level, one third of these countries (4 out of 12) have at least 80% of their districts in which half the population is within two hours travel time to the nearest functional EmOC facility: Benin with 97% of districts reaching the 50% target, Burkina Faso with 80% of districts, Senegal with 87% of districts, and Togo with 90% of districts.

The *ENAP-EPMM Joint Tracking Tool* also assessed progress on four core components of EmOC. As shown in figure 10, there are still major gaps in EmOC planning and budgeting. While quality of care is critical to advance progress towards ending preventable maternal mortality and morbidity, few countries have defined standard norms for basic EmOC facilities, including the minimum number of midwives required to ensure 24 hours/7 days availability of care. Collecting regular data on the functionality of EmOC facilities is also a challenge. To address this issue, EPMM has developed a light assessment tool for countries to measure EmOC readiness and functionality.

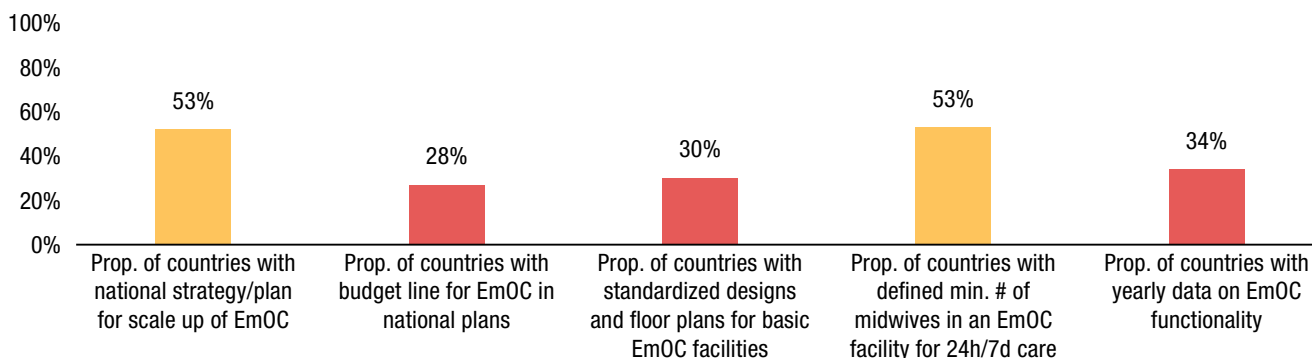
Accelerating progress in access and quality of EmOC at national scale requires countries to optimize their planning for EmOC, focusing their resources on a prioritized number of EmOC health facilities with a good accessibility coverage at national and sub-national levels. Reaching EPMM target 4 also requires additional investments and commitments for EmOC at all levels of the health system to strengthen the needed infrastructure, supplies, skilled health personal, and data for improving quality EmOC. Finally, using travel time measures can facilitate collaborations beyond the health sector to address geographic barriers in access to care.

EPMM target 5: Women to make their own informed decisions regarding their sexual and reproductive health

Harmful gender norms, biases and inequalities negatively impact the rights of women and girls, including their right to safe, quality and affordable healthcare services and is a major cause of maternal mortality and impacts newborn mortality as well as nurturing care, parenting across the life course. EPMM target 5 (corresponding to SDG 5.6.1) aims to accelerate progress to ensure that, by 2025, at least 65% of women globally make their own informed decisions regarding reproductive health care, contraceptive use, and sexual relations. In 2023, only 59% of married or in-union women aged 15 to 49 make their own decisions regarding sexual and reproductive health and rights, based on data from 48 countries. Analysis of the three sub-indicators shows that while women seem to have the most autonomy in deciding whether or not to use contraception, only three in four women can decide on their own health care or say no to sex (figure 11).

At the subnational level, EPMM target 5 aims to ensure that at least 80% of districts (or an equivalent subnational unit) in every country have 65% of women making their own informed decisions regarding reproductive health care, contraceptive use, and sexual relations. Among the 48 countries with recent data (from 2014), only eight reached this subnational target at the regional or provincial level (table 3). Among the 24 countries from sub-Saharan Africa with recent data, on average only 12% of regions or provinces reached the sub-national target of 65% coverage.

Figure 10: Progress across four core components of EmOC – proportion of reporting countriesⁱ

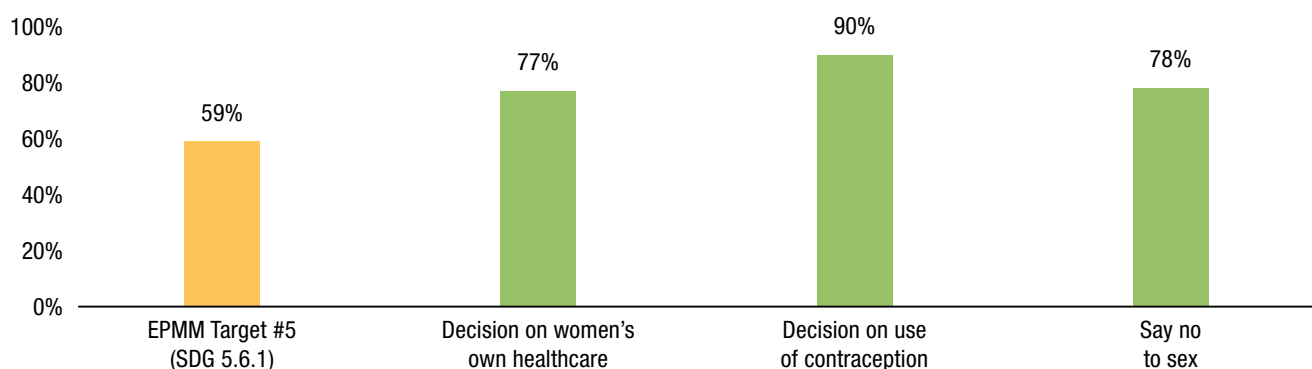


Note: Estimates are based on self-reports from 104 countries.

Source: ENAP-EPMM Joint Tracking Tool analysis, 2023.

i. Denominators include only those countries that responded to the specific question(s) in the Joint ENAP-EPMM Tracking Tool (i.e., countries missing data have been excluded). Note: N=104 for national strategy, budget lines, standardized designs and floor plans, HR norms, and data.

Figure 11: Proportion of women aged 15-49 years who make their own decisions regarding sexual and reproductive health and rights (including deciding on their own health care, deciding on the use of contraception, and can say no to sex); most recent data 2014-2022



Source: United Nations Population Fund, global databases, 2023.

Note: Data based on the Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys (MICS) and other national surveys conducted in the 2014-2022 period.

Critical to individuals' ability to decide freely on their sexual and reproductive health and rights is the extent to which laws prevent or enable access to relevant sexual and reproductive health care and information. Among the 115 countries with data, countries have in place, on average, 76% of the laws and regulations needed to guarantee full and equal access to sexual and reproductive health and rights.^j Although laws and regulations exist to guarantee access to maternity care in 95% of reporting countries, 7% of these countries require a woman to be married to access those services.

Moving forward, accelerated progress is needed in countries and across regions and provinces within countries to strengthen the rights of women and girls to make their own informed decisions regarding reproductive health care, contraceptive use, and sexual relations. This requires further working with communities and involving women in shaping improvements to access and quality of care. In addition to the provision of quality care in health facilities, accelerated progress in ending preventable maternal and newborn mortality and morbidity will require substantive efforts in addressing the delays to seek and reach care.

Table 3: Coverage of EPMM target 5 at the subnational level

	Number of countries with recent data	Number of countries reaching EPMM 5 sub-national target of 80% of regions or provinces with 65% coverage
Global	48	8 (17%)
Sub Saharan Africa	24	0 (0%)
Central and Southern Asia	7	1 (14%)
Eastern and South-Eastern Asia	5	2 (40%)

Note: Table includes 48 countries with data from 2014.

Source: United Nations Population Fund analyses, 2023.

Next steps for coverage targets

Achieving the SDG, ENAP and EPMM targets is possible, but will require investment and commitment at all levels. Additional efforts are needed to strengthen antenatal, intrapartum, postnatal and newborn care with a focus on addressing inequities. It is important to note that many of the subnational areas with the lowest coverage are also those with the lowest immunization rates. This presents an opportunity for integration with priority immunization program priorities (e.g., zero-dose communities) to target these areas with multiple integrated interventions.

Further, the COVID-19 pandemic is one of the factors stalling progress, and we need to learn lessons from the resiliency of health systems during the pandemic to further strengthen our response, and build on resources for pandemic response. As a global community, we also need to strengthen data systems for real time quality data to track progress not just on contact but on quality of services, including experience of care. There is potential – but the time to act is now.

^j. Based on official responses to the United Nations 12th and 13th Inquiry among Governments on Population and Development. United Nations Population Fund, 2022.



What will it take to improve coverage with quality and equity to ultimately reduce mortality?

Data reported by 106 countries into the *ENAP-EPMM Joint Country Implementation Tracking Tool* reveal several key priority themes with respect to country progress.

Investment and political commitment

83% of the reporting countries have established national targets for reducing the MMR and NMR. However, country political commitment and ambition towards reducing stillbirths remains insufficient: only 31% of reporting countries - and only 34% of countries that are currently off track to reach the global target for stillbirth reduction by 2030 - have a national stillbirth target.

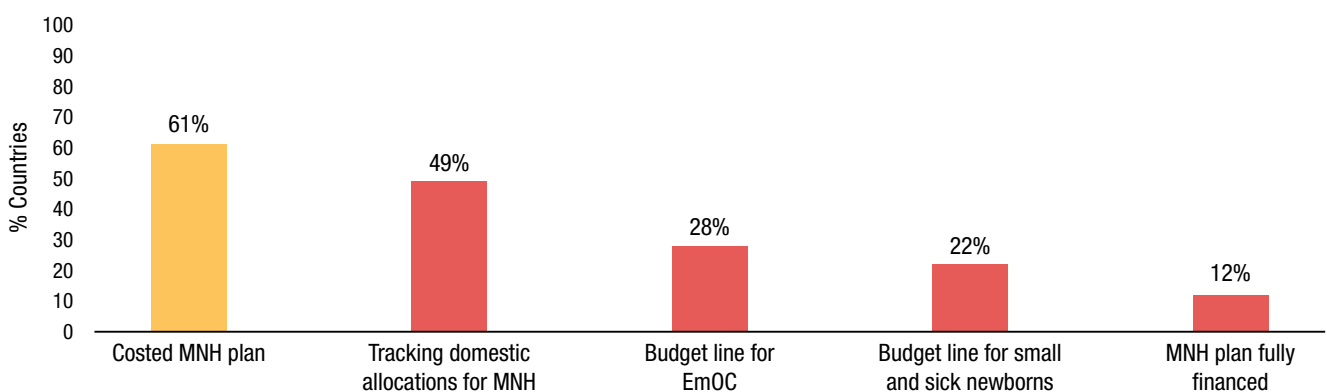
Even where countries have set targets for MMR, NMR and SBR, not all have aligned financing with those targets. As shown in figure 12, only 61% of reporting countries have costed their maternal and newborn health (MNH) plans, and just about half (49%) are tracking allocations for MNH specifically. Even fewer countries have created specific budget lines for emergency obstetric care (EmOC) (28%) and SSNC (22%).

Further, only 12% of countries reported that their MNH plan is fully financed.

While adequate financing to match political commitment was an issue even prior to the onset of the COVID-19 pandemic, 40% of countries indicate that the current context has made domestic financing challenges even more dire. This is particularly true within fragile and conflict-affected countries^k (83% of those countries with data reported a decrease in allocations for MNH following the onset of the pandemic) and sub-Saharan African countries (77% of those with data reported decreased allocations for MNH).^l

Achieving the ENAP-EPMM targets requires a concerted effort from governments, health systems, and communities to ensure health services are accessible and of high quality. Therefore, implementation at subnational levels is crucial. However only about half of reporting countries (49%) indicated that they have a subnational implementation plan for equitable reduction of maternal mortality, neonatal mortality and stillbirth reduction. For 45% of countries, these plans are at the state, regional or provincial level, and for 35% these plans exist at district or equivalent subnational levels.

Figure 12: Costing, tracking and budgeting of MNH in reporting countries (n=106)^m



Source: ENAP-EPMM Joint Tracking Tool analysis, 2023.

k. The 37 countries categorized as experiencing conflict and institutional and social fragility by the World Bank (<https://thedocs.worldbank.org/en/doc/69b1d088e3c48ebe2cd451e30284f04-0090082022/original/FCSList-FY23.pdf>) in fiscal year 2023 include: Afghanistan, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Republic of Congo, Democratic Republic of Congo, Ethiopia, Eritrea, Guinea-Bissau, Haiti, Iraq, Kosovo, Lebanon, Libya, Mali, Marshall Islands, Federated States of Micronesia, Mozambique, Myanmar, Niger, Nigeria, Papua New Guinea, Solomon Islands, Somalia, South Sudan, Sudan, Syrian Arab Republic, Timor-Leste, Tuvalu, Ukraine, Venezuela, West Bank and Gaza (territory), Republic of Yemen, and Zimbabwe.

l. Notably, of all 106 reporting countries, 37 (35%) did not have even data on whether or not COVID impacted domestic allocations for MNH.

m. Denominators used for data in all figures include only those countries that responded to the specific question(s) in the Joint ENAP-EPMM Tracking Tool (i.e., countries missing data have been excluded).

In countries where the private sector plays a large role in provision of MNH services or has the potential to (particularly to provide access to underserved populations or geographic areas), governments need a strategy for accrediting and engaging the private sector to ensure that these services are delivered with quality and accountability. However, only 42% of reporting countries currently have such strategies in place.

Another measure of the extent to which countries are focusing on subnational implementation is the existence of scale up strategies for MNH. Only 53% of reporting countries have a national strategy/ implementation plan for scale up of Emergency Obstetric Care (EmOC) and just under half of all reporting countries (49% have a national strategy/implementation plan for scale up of care for small and sick newborns.

Such scale up plans are necessary to demonstrate country commitment to reducing MNH inequities, improving MNH outcomes and contributing to the achievement of the 90/90/80/80 coverage targets with scale up plans. Moreover, scale up plans will help ensure the sustainability of MNH programmes and interventions by establishing a framework for their continued implementation and monitoring. They can also provide a platform for advocacy and resource mobilization.

Strengthening service delivery for quality and respectful care

Strengthening service delivery for quality and respectful MNH care is essential to improve health outcomes, increase patient satisfaction, and promote equity. This requires accessible, skilled, motivated and respectful healthcare providers, the availability of high-impact, essential commodities and maintenance of appropriate equipment. It also requires community engagement to ensure services are responsive to their needs and preferences and that they are active partners in promoting the health of women and newborns.

Only 51% of countries (54 of 106) reported having a national strategy or plan for MNH. Specialized midwifery, nurses with neonatal nursing skills and community health and extension workers are all critical for MNH. Plans were less likely to include provisions for community health and extension workers. Overall there is clear need for greater investment in community health providers, particularly to ensure they are paid and well supervised, with defined core competencies.

In addition, 42% of countries reported having provisions to ensure equitable posting and distribution of skilled health professionals and just over one-fourth (28%) include provisions to improve motivation and retention of these workers. For example, financial incentives in sub-Saharan Africa to improve motivation and retention include hardship allowances, free accommodation, career progression opportunities and results-based financing schemes. Non-financial incentives include recognition merits (Burkina Faso), trust building mechanisms between staff and the public (Togo), building roads to improve access in hard-to-reach areas as well as mentorship for staff posted in these areas (Tanzania) and provisions to improve workplace safety, workload management and the improved supply of equipment and drugs (Zambia). More countries should consider how both financial and non-financial incentives can be implemented to improve the availability and quality of service provision for MNH.

Community engagement

Community engagement is another critical component of quality of care that remains missing in many countries. Only 36% of countries have a routine maternal and perinatal death surveillance and response system (MPDSR) in place that involves community level stakeholders. Slightly higher percentages of reporting countries stated that the national quality of care plan includes community participation during priority setting and planning (39%) and during monitoring and evaluating (38%). Mechanisms used in these countries to ensure community engagement include health committees, governing boards of health facilities, community dialogues/meetings on selected topics, community scorecards, community health worker involvement, and client satisfaction assessments.

In addition, 54% of countries have updated their national policy in line with the WHO recommendations on intrapartum care for a positive childbirth experience to include allowing a companion of the woman's choice during labour and childbirth, although only 21% of countries (representing 39% of those with an updated national policy to allow companionship) have adapted their routine data systems to include a birth/labour companion. Further, just over half of all reporting countries (51%) have a provision in their policy or guidelines for engaging families in caring for babies. In 42% of reporting countries, the planning of level 2 SSNC units includes provisions for the mother to stay with her baby in the newborn care unit (e.g. bed for mother, toilet, shower, food).

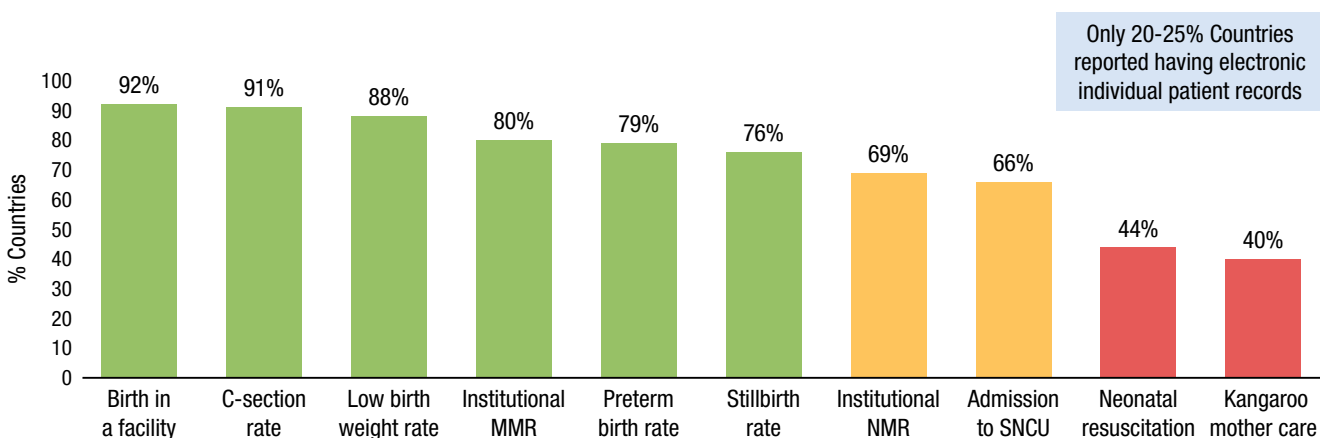
Data and information systems

Data and information are a core component of the provision of quality MNH care because they allow for measurement, programme tracking, informed decision-making, evidence-based implementation and accountability. Many countries are routinely tracking, collecting and using data on maternal and newborn deaths as well as the EPMM and ENAP 2025 coverage targets. However, data and information to inform actions to reduce stillbirths has not been prioritized in many countries. For example, data from the *ENAP-EPMM Joint Tracking Tool* reveal that while birth registration policies are nearly universal among reporting countries (98%), and policies on both maternal death registration with a civil registrar (85%) and neonatal death registration with a civil registrar (83%) are very common, only 61% of countries have a stillbirth registration policy. Further, while 90% of countries have an MPDSR system in place for maternal deaths and 77% do for neonatal deaths, only 58% do for stillbirths.

Most countries have institutionalized key facility-based indicators for MNH and stillbirths into the routine health information systems (RHIS) (figure 13). The inclusion of indicators in order of frequency among reporting countries are birth in a facility, caesarean section rate, low birthweight rate, maternal mortality ratio, preterm birth rate, SBR, pre-discharge NMR, and admission to SSNC unit. Indicators for facility-based neonatal resuscitation with bag and mask and Kangaroo Mother Care are less frequently used within country RHIS.

Reports into the joint *Tracking Tool* from 106 countries across all SDG regions reveal mixed progress towards the ENAP-EPMM targets and milestones. While there is broadly strong political commitment towards achieving the ENAP-EPMM targets across the globe, the necessary investments have not yet been made to support these in many countries. Further, in many cases where national plans and policies are in place, this is not matched by implementation of quality and equitable MNH services at subnational levels. Such services must be delivered in an integrated way to ensure that the health system is strengthened for both women and newborns, and that communities and families are brought in as key partners for accountable and respectful quality care. Additional partnership with the private sector, and other health programme initiatives can drive momentum, efficiency and progress towards the ENAP-EPMM targets. Data systems that capture information on pregnant women, new mothers, newborns and stillbirths in a timely and accurate manner are critical to improving programming to reduce preventable deaths.

Figure 13: Countries with an RHIS that includes key MNH indicators (n=105)



Source: ENAP-EPMM Joint Tracking Tool analysis, 2023.



ENAP-EPMM Measurement Improvement Roadmap

Data for action are important for achieving ENAP-EPMM targets, but there are several challenges relating to the number of indicators, standardization of measurement, and improving data quality and use. Hence, ENAP and EPMM have developed a Measurement Improvement Roadmap focused on strengthening measurement around ENAP-EPMM targets and priorities and identification of priority research topics to improve and use data moving forward. The roadmap has the following three aims:

1. List of priority indicators with a focus on ENAP-EPMM targets

CORE indicators for achieving ENAP-EPMM targets

ESSENTIAL indicators to track quality and critical outcomes

Indicators have been colour coded to highlight those that are well-defined and feasible to collect now (green), those that require implementation learning to improve data collection in routine data systems and other platforms (yellow), and those indicators that require research to define, develop and test (red) (table 4).

Table 4: Indicators for ENAP-EPMM, focused on tracking targets

		CORE TO MEASURE TARGETS	ESSENTIAL MEASURES TO TRACK QUALITY
Impact	MORTALITY TARGETS: MMR, SBR, NMR	Maternal mortality ratio	Cause of death for maternal, stillbirth, neonatal
		Stillbirth rate	Small for gestational age rate
		Neonatal mortality rate	Intrapartum stillbirth rate
		Preterm birth rate	Postpartum haemorrhage rate
		Low birthweight rate	Maternal morbidity
		Adolescent birth rate	Maternal wellbeing
			Neonatal morbidity and neurodevelopmental developmental outcomes
Every Pregnant Woman	COVERAGE TARGET 1: Antenatal care contact	Four or more antenatal care contacts	Gestational age assessment
Every Pregnant Woman with Complications		Eight or more antenatal care contacts	Screening for anaemia
			Identification and management of hypertension*
			Management of anaemia*
Every Birth	COVERAGE TARGET 2: Skilled Birth attendance	Skilled attendant at birth	Companion of choice at labour/birth
		Births in health facilities	FHR on admission, monitoring, and response
			Uterotonic immediately after birth to prevent PPH
Every Birth with Complications			Antenatal corticosteroids
		Caesarean section rate	Vacuum delivery rate
			Robson Classification group 1
			Newborn resuscitation with bag and mask
			Identification and management of PPH
Every Woman and Newborn	COVERAGE TARGET 3: Postnatal care contact	Early postnatal care	Modern contraceptive method initiated prior to discharge following a facility birth
		Early initiation of breastfeeding	Exclusive breastfeeding to six months
			Identification and management of maternal sepsis
Every Woman and Newborn with Complications			Admission to neonatal inpatient ward (SSNC)
			Identification and management of serious neonatal infections
			Kangaroo mother care

		CORE TO MEASURE TARGETS	ESSENTIAL MEASURES TO TRACK QUALITY
Availability of emergency services	COVERAGE TARGET 4: Availability of emergency maternal and newborn services	Availability of Emergency Obstetric Care (EmOC) health facilities at district level (or sub-national planning equivalent)	Service readiness inputs including systems inputs: infrastructure, medicines and devices, health care workers, data systems etc
		Availability of SSNC WHO care level 2+ services with CPAP at district level (or sub-national planning equivalent)	Service readiness inputs including systems inputs: infrastructure, medicines and devices, health care workers, data systems etc
Equity and access	COVERAGE TARGET 5: Social determinants	Informed and empowered decision making for care	
Information systems	Counting births and deaths	Birth registration	Individual-level data set for maternal quality of care
		Maternal and neonatal death registration, plus stillbirths	Individual-level data set for neonatal quality of care
Across the continuum of care	Assess across maternal and newborn health		Patient/user-reported outcomes, respectful maternal and newborn care
			Bereavement care after death (maternal, stillbirth, neonatal)
			Functional referral systems

- Indicator defined and feasible to collect - Strengthened data collection and promotion of data quality and use required
- Implementation learning to improve data collection and use in routine systems and other platforms is required
- Research to define, develop and test indicators is required (noting all outcomes and interventions that have an agreed clinical definition)

ENAP/EPMM Milestones	Policy and plans, Investment, Equity, Response and Resilience
	Quality of Care, Health workforce, Medical commodities and technologies, Data for action
	Research, innovation and knowledge exchange, and Accountability


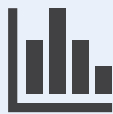



2. Identify what to do now to improve data

For impact measurement, data sources include civil registration, household surveys, and research studies, with the preferred source of Civil Registration Vital Statistics (CRVS). Data availability for stillbirths, low birthweight and preterm birth rates have improved over the last decade, but more detailed information on timing of intrapartum stillbirth is urgency needed (12). Continued strengthening of CRVS could increase timely data availability for action. For ENAP-EPMM coverage targets around ANC, SAB and PNC, the majority of data are from household surveys. Countries with the highest burden have the least data (13). Increasing quality of data for coverage targets from RHIS is a priority. Better data for tracking the content or quality of care is another major priority, and population-based surveys based on recall cannot always provide reliable data on more complex clinical interventions. Notably, around 80% of all births globally occur in health facilities providing an opportunity to capture better data on preterm birth and intrapartum care.

3. Outline what to do next for improving measurement and use of data

More ambitious, targeted measurement improvement is required to track progress to 2030. Tracking of deaths and cause of death can be improved with standardized classifications of death (i.e. the *International Classification of Diseases 11th Revision*) for maternal and neonatal deaths and stillbirths. Detailed individual-level datasets for maternity and newborn inpatient wards are critical, as Individual-level datasets with unique identifiers enable tracking short and long-term health and development outcomes. Such linked data are important to ensure progress beyond survival - so that every pregnant woman, new mother and newborn can also thrive.

Table 5: Actions to improve and use data

<p>Increase quality and use of data from all data collection platforms, including subnational tracking for equity</p> 	<ul style="list-style-type: none"> • Prioritize, standardize, and improve data flow of aggregate data for tracking targets • Track national and subnational data to reduce inequities and drive local change (including private sector) • Utilize context specific indicators for humanitarian and fragile settings
<p>Measure quality of care to drive local change</p> 	<ul style="list-style-type: none"> • Operationalise standardized measures for comparisons among facilities, districts, and countries • Test and implement individual-level data sets for maternity and newborn care wards • Implement evidenced-based guidance on registers, and clinical/patient notes
<p>Ensure every stillbirth is counted</p> 	<ul style="list-style-type: none"> • Advocate for registration of stillbirths (in CRVS) and inclusion in MPDSR systems • Operationalise indicators to track coverage and quality of care for stillbirth prevention (e.g., weight, gestational age assessment, fetal heart rate on admission) and track bereavement care for affected families
<p>Track experience of care for women and newborns</p> 	<ul style="list-style-type: none"> • Develop and test potential experience of care indicators and their feasibility for routine measurement and reporting
<p>Follow-up with women and newborns at risk</p> 	<ul style="list-style-type: none"> • Refine, develop, and test measures and tools to track maternal morbidity, mental health, and well-being and neonatal conditions or complications

Finally, research is needed to better measure content and experience of care. Especially how to incorporate valid measures into routine systems, including assessment of bereavement support after stillbirths and other adverse outcomes. Referral systems are fundamental for effective care. More feasible and comparable indicators for referral are needed for planning and improving outcomes for vulnerable women and babies with emergencies. Ensuring the right data are available at the right time is critical for informing change and driving accelerated progress at national and subnational levels.



Priority actions to reduce maternal deaths, stillbirths and newborn deaths

Healthy women and children are the backbone of a healthy and productive society. MNH is critical for achieving universal health coverage (UHC) using a primary health care approach.

Yet an estimated 4.5 million maternal deaths, newborn deaths and stillbirths still occur globally each year - the vast majority of which are completely preventable. Interventions and technologies exist which, if made available to all pregnant women, new mothers and newborns, would significantly reduce needless suffering and tragedy across the world. However, as we reach the mid-point of the SDG era, mortality has plateaued or is progressing too slowly and the world is off track to achieve the global targets for maternal deaths, newborn deaths and stillbirths. This is inexcusable and unnecessary.

There are positive indications that coverage of lifesaving maternal and newborn interventions is increasing in many countries, but inequities endure, and coverage does not include adequate quality or content. An evidence-based, equity-focused approach must guide future efforts to roll out these interventions, including, at the global and regional levels, prioritization of slow progressing countries and high burden areas within countries, linking with attaining UHC.

At country level, MNH programmes and interventions must be prioritized within health budgets and re-designed to ensure that high quality care is available to all women and newborns in need. To address maternal health complications, functional facilities providing quality care must be accessible for everyone in need. And there is strong evidence that SSNC units can save lives. Ensuring that women and babies have access to the quality care they need will require significant and aligned investments in infrastructure and training.

Further, stillbirth remains neglected on the agenda of the maternal and newborn communities at all levels. There is a critical need to invest in routine ANC and quality care around the time of birth, and not simply the management of complications. Stillbirth prevention must become a routine part of the Reproductive, Maternal, Newborn, Child and Adolescent Health (RMNCAH) continuum of care.

Finally, across all three priorities, we need more data – including on financing and costs of provision of quality MNH care, better quality data and use of data for action at all levels within a primary health care/UHC framework.

The data and evidence presented in *Together for Change: For Every Pregnant Woman, Every Mother, Every Newborn* suggest several priority actions are required to accelerate progress towards the global targets. These actions include:

Commitment and investment	Ambition and investments must match the ENAP-EPMM targets. Political commitment to the targets along with necessary investments must be mobilized to achieve universal health coverage. Improved synergies in planning, tracking of financial investments and accountability measures are needed to achieve targets for women and newborns.
Planning and implementation for equity	Local implementation is crucial for national progress to reach all women and newborns. A focus on implementation at subnational levels is crucial to ensure equitable progress, including in fragile and humanitarian settings. Planning must be backed up with local action to achieve targets at global, national and subnational levels.
Service delivery for quality	Systems should be adapted to deliver quality care for women and newborns. Health care systems that are synergistic, efficient, and integrated are necessary to support quality and respectful care for pregnant women and newborns. This requires strengthening infrastructure, health worker capacities and competencies, commodity and device availability and supply chains, referrals and networks of health facilities.
Accountability and partnerships	Women, families and communities should be partners in planning, monitoring and supporting services for accountability. The role of the private sector in supporting improved coverage and equity of maternal and newborn interventions should be explored. Synergies with other ongoing initiatives and programmes such as family planning, polio, reaching zero dose communities for immunization, and community and child health are needed for accelerated progress.
Data improvement and use	Data systems need intentional shifts to track and address coverage, equity and quality gaps. This will require synergies in maternal and newborn datasets, prioritising key data points and ensuring national and subnational data, including in fragile and humanitarian settings, to drive quality, equity and accountability.



Conclusion

Numerous successes are documented in this first joint global report, and Annex A spotlights innovative and effective strategies that countries have undertaken. But far too many women, stillbirths and newborns continue to die from preventable causes. We are at a critical juncture at this midpoint in the SDG era that will require significant shifts to accelerate progress towards the three global SDG targets. Accelerating progress towards these targets demands a concerted effort by all stakeholders, including governments, health organizations and communities to implement effective MNH strategies and interventions, particularly at subnational levels. While each country will have different challenges and priorities, commitment and investments to ensure quality primary health care for all pregnant women, mothers and newborns, sufficient numbers of skilled providers, and access to care in the crucial 24 hours around birth are nonnegotiable requirements for all settings. This is a vital step towards achieving UHC with a primary health care approach.

The world is facing multiple concurrent crises including conflict and other emergencies, climate change, economic downturns and the SARS-COV2 pandemic. Now more than ever, advocacy is needed for international and domestic investments to prevent maternal and neonatal mortality and stillbirths. MNH policies and plans exist in many countries but need to be implemented at local levels, with investment in and monitoring of care for women and their newborns.

This report is an urgent call to align our collective investments and actions to accelerate progress towards the global targets for MNH and reduced stillbirths and ensure that we can work *Together for Change: For Every Pregnant Woman, Every Mother, Every Newborn*.



Bibliography

1. Every newborn: an action plan to end preventable deaths. Geneva: World Health Organization; 2014 (<https://apps.who.int/iris/handle/10665/127938>).
2. Targets and strategies for ending preventable maternal mortality. Consensus statement. Geneva: World Health Organization; 2014 (https://apps.who.int/iris/bitstream/handle/10665/130776/WHO_RHR_14.21_eng.pdf).
3. Strategies toward ending preventable maternal mortality (EPMM). Geneva: World Health Organization; 2015 (<https://www.who.int/publications/i/item/9789241508483>).
4. Ending preventable newborn deaths and stillbirths by 2030. Geneva: World Health Organization and UNICEF; 2020 (<https://www.unicef.org/media/77166/file/Ending-preventable-newborn-deaths-and-stillbirths-by-2030-universal-health-coverage-in-2020%25E2%2580%25932025.pdf>).
5. WHO, UNFPA. Ending preventable maternal mortality (EPMM): a renewed focus for improving maternal and newborn health and well-being. Geneva: World Health Organization; 2021 (<https://www.who.int/publications/i/item/9789240040519>).
6. WHO, UNICEF, UNFPA, World Bank Group and UNDESA/ Population Division. Trends in maternal mortality 2000 to 2020: estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/ Population Division. Geneva: World Health Organization; 2023 (<https://www.who.int/publications/i/item/9789240068759>).
7. Never forgotten: The situation of stillbirth around the globe. Report of the United Nations Inter-agency Group for Child Mortality Estimation, 2022. New York: United Nations Children's Fund; 2023 (<https://data.unicef.org/resources/never-forgotten-stillbirth-estimates-report/>).
8. United Nations Inter-Agency Group for Child Mortality Estimation (UN IGME). Levels & trends in child mortality. Report 2022. New York: United Nations Children's Fund; 2023 (<https://data.unicef.org/resources/levels-and-trends-in-child-mortality/>).
9. FY23 List of Fragile and Conflict-affected Situations. Washington: World Bank; 2023 (<https://thedocs.worldbank.org/en/doc/69b1d088e3c48ebe2cdf451e30284f04-0090082022/original/FCSList-FY23.pdf>).
10. Pirkle CM, et al. Emergency obstetrical complications in a rural African setting (Kayes, Mali): The link between travel time and in-hospital maternal mortality. *Matern Child Health J* 2011;15:1081-7.
11. World Health Organization, United Nations Population Fund, Mailman School of Public Health. Averting Maternal Death and Disability & United Nations Children's Fund. Monitoring emergency obstetric care: a handbook. Geneva: World Health Organization; 2009 (<https://apps.who.int/iris/handle/10665/44121>).
12. Lawn JE Ohuma EO, et al. Small Vulnerable Newborns 2. Small babies, big risks: Global estimates of prevalence and mortality for vulnerable newborns to accelerate change and improve counting. Forthcoming in *The Lancet*.
13. Moxon SG, et al. Count every newborn; a measurement improvement roadmap for coverage data. *BMC Pregnancy and Childbirth* 2015; 15(2):1-23.

Annex A: Country Spotlights

A1. Increasing and supporting the health workforce to implement quality care in Sierra Leone

Sierra Leone's commitment to quality UHC rapidly advanced following the adoption of Maternal, Newborn and Child Health (MNCH) Quality of Care Standards in 2016. The Standards informed the development of a National Quality Management Programme, set out in the *National Quality and Patient Safety Policy and Strategic Roadmap (2021- 2024)*, and its implementation strategy; the '*Quality RMNCAH Strategic Roadmap*' (2020-2024), which is overseen by a National Quality Technical Working Group.

Quality care is integrated into all District Health Plans and operationalised through a novel quality-of-care management structure including district and hospital Quality of Care and Patient Safety Officers (Quality Officers). The Quality Officers are budgeted and tasked to lead quality improvement activities in collaboration with programme unit staff in districts and clinical ward staff in facilities.

Midwifery is the cornerstone of expanding quality care to all districts and the Government has made tremendous progress in scaling up recruitment: there are now 2647 trained midwives (up from 57 in 2010), with a target of 3500 by 2025. A range of activities to support the growing cohort of midwives has been implemented by the Ministry of Health and Sanitation, supported by partners:

- Development of a national nursing and midwifery policy, curriculum and preceptorship training model, which aims for all graduating midwives to have the essential skills to practice effectively and safely.
- Roll-out of the Emergency Obstetric and Newborn Care training and mentorship programme, to enable midwives and other clinicians to manage common emergency complications.
- Midwives taking the lead in maternal death investigations, to help ensure steps are taken to address gaps or delays in care.
- Transforming the Nurses and Midwifery Board into an independently functioning Council that can better regulate the professions.
- Assessment of the midwifery schools against international standards.

Additional activities undertaken to enable health workers to deliver quality MNH care include:

- *Roll out of guidance and tools:* Quality Improvement Training Manual (Facilitator and Participant), Respectful Maternity Care Guideline, Integrated MNH Quality of Care Assessment and Improvement Tool, National Paediatric Mortality and Morbidity Audit tool, Experience of Care Assessment Tool for MNH and Paediatric, Integrated RMNCAH Supervision Checklist.
- *Capacity building of health care workers:* Quality Improvement methodology and approaches (over 400 health care workers trained in 2022), training of Quality of Care Officers on a MNH Implementation Package and Data Management, training of staff on Respectful Maternity Care (Princess Christian Maternity Hospital, Kambia, Pujehun supported by GIZ and Makeni Hospital supported by UNFPA), training of RMNCAH Technical Leads on quality improvement.

A2. Communities as partners in implementing quality MNH in Ghana

Community engagement is the foundation of Ghana's primary health care approach and agenda towards UHC (1). This includes implementing the Community-Based Health Planning Services (CHPS), which provides a community-driven approach to delivering health care (2). Within CHPS, health workers are supported to harness community resources and Community Health Management Committees (CHMCs) are integrated within health facilities to ensure community representation (3).

More recently, the Community Scorecard has been adopted to strengthen accountability and monitor feedback from service users and communities on quality MNH. The Community Scorecard has become the essential tool for receiving community input for improving the experience of care (4). This process involves:

- quarterly facility assessments by Community Health Management Committees;
- action plans for continuous improvement generated by health facility leadership;
- convening of communities to provide feedback in the Community Scorecard;
- entering data into an online tool which is accessible at the district, regional and national levels for review and decision-making; and
- development of a performance contract between regional directors and health facilities to act on the needs identified in the Community Scorecard.

The MNH Community Scorecard has motivated efforts to strengthen other health system areas beyond maternal and newborn health such as HIV. Evaluation and research have been undertaken and additional efforts are planned to continue to refine the scorecard process to maximize its potential.

Finally, Ghana has approved a National Costed Strategy and Workplan for Communication, Advocacy and Social Accountability (2022-2025). This will provide guidance on community and stakeholder engagement on interventions for improving RMNCAH-N and strengthen collaborative efforts on the provision and access to health services for quality MNCH and nutrition.

References

1. Ghana National Healthcare Quality Strategy (2017-2021). Accra: Ministry of Health; 2016.
2. Awoonor-Williams K, Japan International Cooperation Agency, USAID. National Community-based Health Planning and Services (CHPS) Implementation Guidelines. Accra: Ministry of Health; 2016.
3. WHO Country Office; 2023. Accra: Ghana Health Services; 2022.
4. Dada S, et al. What's in a name? Unpacking 'Community Blank' terminology in reproductive, maternal, newborn and child health: A scoping review. *BMJ Global Health*. 2023;8(2):e009423.

A3. Provision of MNH services during emergencies in Pakistan

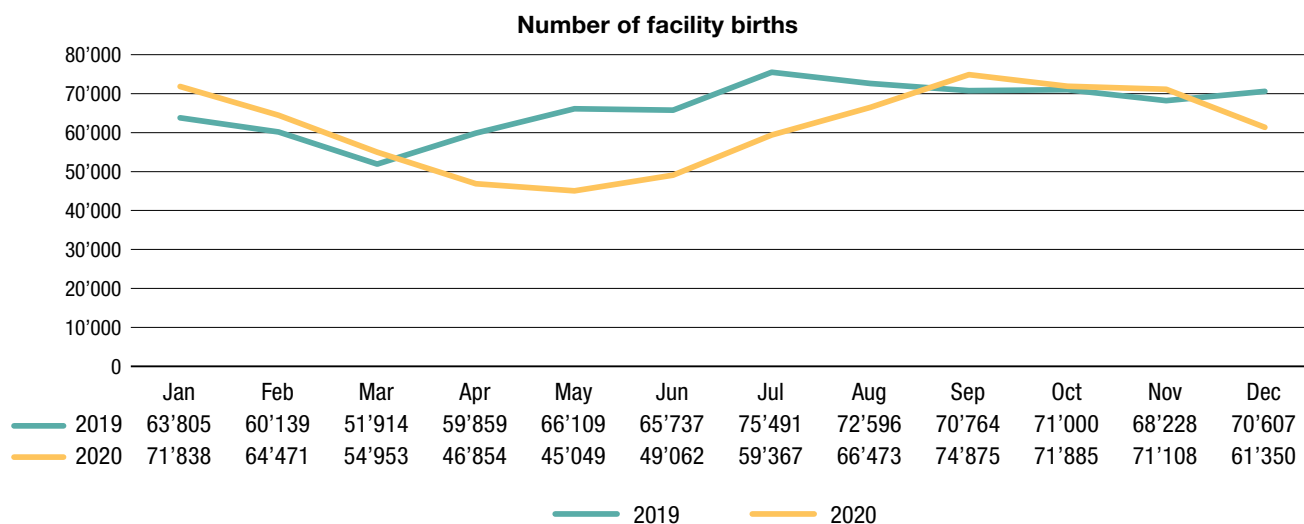
Over the past two decades, Pakistan has endured natural disasters and humanitarian crises which significantly affected resource allocation, planning, service provision and uptake at both national and subnational levels (1). Such emergencies hamper routine care and causes widespread displacement. While subnational or provincial level leadership played an important role in risk mitigation and resource mobilization, maternal and perinatal health were not always prioritized at the service delivery level.

At the beginning of the COVID-19 pandemic, the numbers of ANC visits/contacts, facility births and PNC declined. The pre-existing National Technical Working Group (TWG) for RMNCAH, of which 33% of members represented provincial governments, guided formulation of subcommittees and response bodies at both federal and provincial levels to provide oversight for the continuation of routine and emergency services. By the end of 2020, coverage of key MNH interventions returned to pre-pandemic (2019) levels (2). Figure 11 shows the changes in coverage over time for facility births.

Number of facility births before (2019) and during (2020) the COVID-19 pandemic in Pakistan

Pakistan also developed policies, guidelines and plans in response to the pandemic. Its strategic framework for *Provision of Maternal and Newborn Health Services during and post-COVID-19* (3) included advocacy for non-diversion of health care resources at the expense of RMNCAH and nutrition (RMNCAH-N) resources; disaggregating surveillance and overall response efforts, including case management, by age, gender, pregnancy status; segregating maternal health units from COVID-19 cases; protecting the health care workforce from exposure to COVID-19 with various measures; and ensuring continuous supply of life-saving drugs and equipment for essential health services.

A1: Number of facility births before (2019) and during (2020) the COVID-19 pandemic in Pakistan



Source: WHO (2021). Maintaining the provision and use of services for maternal, newborn, child and adolescent health and older people during the COVID-19 pandemic: Lessons learned from 19 countries. Geneva: World Health Organization. <https://apps.who.int/iris/handle/10665/351108>.

Strategies were adopted into health care guidelines in the context of COVID-19, such as standard operating procedures for maternal, newborn, child, adolescent and ageing health (MNCAAH) services and training of the workforce. Actions the government deemed most important during the pandemic included maintaining MNCAAH commodities; using digital health and social media channels for health information, risk communications and teleconsultations; task shifting and retraining of health staff; government commitment and leadership in sustaining services; mobilizing partners to provide assistance; and strengthening infection protection and control at all levels (4).

Based on global modelling guidance (5), an additional 440 maternal and 20 842 newborn deaths are estimated to have taken place during the height of the pandemic in Pakistan in 2020 and these mitigation measures saved 424 maternal lives and over 18 000 newborn lives.

References

1. Syed U, et al. Advancing maternal and perinatal health in low- and middle-income countries: A multi-country review of policies and programmes. *Frontier Global Women's Health* 2022; 3:909991. doi: 10.3389/fgwh.2022.909991.
2. Maintaining the provision and use of services for maternal, newborn, child and adolescent health and older people during the COVID-19 pandemic: Lessons learned from 19 countries. Geneva: World Health Organization. 2021; (<https://apps.who.int/iris/handle/10665/351108>).
3. Research and Development Forum for Safe Motherhood and Pakistan White Ribbon Alliance (August 2020) The Provision of Reproductive, Maternal, Newborn, Child Health and Nutrition (RMNCH-N) Services During and Post-Covid-19 – A Strategic Framework. Islamabad.
4. Stakeholder consultation for PPH Country Case Study in Pakistan, conducted in Jan-Feb 2023.
5. Modelling the health impacts of disruptions to essential health services during COVID-19, Module 1: Understanding modelling approaches for sexual, reproductive, maternal, newborn, child and adolescent health, and nutrition. Geneva: World Health Organization. 2021; (<https://www.who.int/publications/item/9789240027695>).

National trends on selected indicators in Pakistan

- MMR: 387 (2000) to 154 (2020) per 100 000 live births
- NMR: 56.7 (2000) to 39.4 (2021) per 1 000 live births
- SBR: 40 (2000) to 31 (2021) per 1 000 total births
- Skilled personnel at childbirth: 39% (DHS 2007) to 74% (PMMS 2019)
- Facility birth: 21 (2000) to 70 (2020)
- Private facility birth: 42.6% of total facility birth in 2019.

Sources: United Nations Inter-agency Group for Child Mortality Estimation (2023); National Institute of Population Studies (NIPS) [Pakistan] and ICF (2020); NIPS and ICF (2020) *Pakistan Demographic and Health Survey 2018-19*. Islamabad, Pakistan, and Rockville, Maryland, USA: NIPS and ICF.

A4. Institutionalizing MPDSR to improve the quality of MNH care in Nigeria

In many settings, poor quality care is a greater contributor to poor health outcomes than care coverage and it is estimated that about half of maternal deaths and 58% of newborn deaths could be averted with quality health care (1). Maternal and Perinatal Death Surveillance and Response (MPDSR) (2) is an essential quality of care (QOC) intervention that aims to improve maternal and newborn health outcomes. Understanding and tracking the number and causes of death is key to improving maternal, perinatal, and neonatal survival. Systematic analyses of mortality trends and the factors that contribute to individual deaths can help uncover QOC and health systems deficits and inspire local solutions. The MPDSR continuous action cycle relies on teams to collect information on when, where, and why women and babies die, and outline the necessary actions to prevent similar deaths.

In 2021, Nigeria passed the National Maternal and Perinatal Death Review and Response Bill as “an act to provide the surveillance, review and prevention of maternal and perinatal deaths and related matters.” In addition, Nigeria recognized that implementing parallel programmes on MPDSR and quality improvement is a duplication of time and resources for the same health workers, managers and partners. The National RMNCAH-N Strategy therefore outlines one plan for integrated implementation. Coordination structures to facilitate integrated implementation include a MPDSR QOC National Steering Committee, chaired by the Honourable Minister of Health, and a secretariat supporting implementation in all state tertiary hospitals and federal medical centres. At the State level, a state MPDSR QOC Committee reports to the State MOH and leads implementation in primary and secondary facilities (1).

MPDSR and QoC structures and activities are aligned and integrated at the subnational level as well. In Ebonyi and Kogi States, for example, members of the MPDSR committees in the two states worked in collaboration with state, local government areas (LGAs) and health facility managers to prioritize state-wide MNH areas for improvement and to understand root causes of QOC problems at tertiary, secondary and primary health care (PHC) levels. A subnational monthly reporting template was harmonized to capture MPDSR and quality improvement (QI) activities and results. District and state MPDSR committee members participated in all QI learning meetings across facilities and helped to support QI, clinical and MPDSR capacity building activities. In Sokoto State, MPDSR structures have been incorporated into a state-wide operational plan to improve quality of maternal, newborn and child health care, including participation of the state MPDSR committee chair as part of the state QI Technical Working Group. In addition, in primary health care centres (PHCs) death audits were incorporated as part of the responsibility of PHC QI teams.

References

6. Kruk ME, et al. High-quality health systems in the Sustainable Development Goals era: Time for a revolution. *Lancet Global Health*. 2018;6(11):e1196-e1252.
7. WHO, et al. Maternal death surveillance and response: technical guidance. Information for action to prevent maternal death. Geneva: World Health Organization. 2013; (<https://apps.who.int/iris/handle/10665/87340>).

A5. Malawi's national assessment of SSNC and use of data to drive quality of care

The government of Malawi, in partnership with the Newborn Essential Solutions and Technologies

(NEST360) (1) alliance of 17 organizations and UNICEF, have co-designed scalable data tools to score service or systems readiness using a Health Facility Assessment tool that is now open access (2). This tool has also been used in four other African countries to assess and improve subnational implementation (3). An important consideration is that even if facilities are present, and the core components are in place for service readiness, coverage of interventions for neonates can still be low. For example, using neonatal inpatient data that is individually linked can identify facilities with low CPAP coverage or high rates of hypothermia by using live dashboards and can enable quality improvement action plans to address these gaps (4).

References


1. Newborn Essential Solutions and Technologies (NEST360). (<https://nest360.org/>).
2. R Penzaias et al. Health facility assessment of small and sick newborn care in low- and middle-income countries: Systematic tool development and operationalisation with NEST360 and UNICEF. Forthcoming in *BMC Peds*.
3. NEST360, United Nations Children's Fund. (www.newborntoolkit.org).
4. Cross JH et al. Neonatal inpatient dataset for small and sick newborn care in low- and middle-income countries: Systematic tool development and feasibility with NEST360. Forthcoming in *BMC Peds*.

A2: Malawi's national assessment of SSNC and use of data to drive quality of care

➔

27 districts
37 newborn care units

Zones	Districts
Central East	Dowa
	Kasungu
	Nkhotakota
	Ntchisi
	Salima
Central West	Dedza
	Ntcheu
	Mchinji
	Lilongwe
	Chitipa
Northern	Karonga
	Likoma
	Mzimba
	Nkhata Bay
	Rumphi
South East	Balaka
	Machinga
	Mangochi
	Mulanje
	Phalombe
South West	Zomba
	Blantyre
	Chikwawa
	Chiradzulu
	Mwanza
	Neno
	Nsanje
Thyolo	



National Health Facility Assessment (HFA)

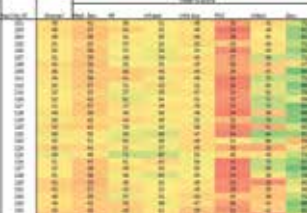



Tool: Co-designed with Malawi and 3 other country governments. the NEST360/ UNICEF HFA can be done in one day using hand held devices.

Results and data use: using automated code, with a short summary report for benchmarking eg human resource ratios. Heat-mapping per facility by health system building blocks shows facility specific strengths and weakness, plus national gaps. Eg Family centred care scored low in almost all facilities.

National neonatal inpatient dataset and live dashboards

Tool: Neonatal Inpatient Dataset (NID) was co-designed by Malawi and 2 other country governments, with 57 variables collected on every neonatal admission. DHIS2 can track neonatal admissions, and this linked NID gives detail to measure effective coverage and quality of care.

Results and data use: using automated data quality checks, data flow into a live dashboard to track neonatal admission and deaths by birthweight, and for use in QI. For eg on CPAP use, KMC or hypothermia.

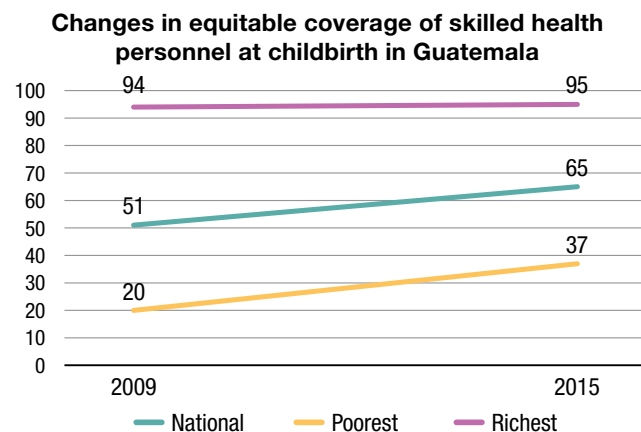





A6. Engaging indigenous communities to address equity gaps in Guatemala

Indigenous and non-indigenous groups make up the Guatemalan population. In 2018, over 43% of the population was indigenous including the Mayan, the Xinca, and the Garifuna. Poverty affects 75% of indigenous and 36% of non-indigenous people (1, 2). Over the years, indigenous populations have experienced social exclusion and discrimination, particularly women and girls (3), issues that are at times reflected in the practices of providers within health institutions (4). To strengthen relations between health care providers and indigenous populations in order to improve the health and quality of life of women and their newborns, especially in relation to care during childbirth, the Guatemalan government undertook various strategies.

Over the decades, traditional birth attendants (TBAs), mainly Mayan or Garifuna, have continued to play key roles in providing health care for pregnancy, childbirth and postpartum care. In recent years, the Ministry of Health (MOH) has worked to improve coordination between these valued providers and the public health system. For example, in 2002, the System of Development Councils (SISCODE) was formed at national, regional, departmental, municipal and community levels as a means to facilitate participation, particularly the Mayan, Xinca and Garifuna populations, in public management (5). Community level health committees, known as Consejos Comunitarios de Desarrollo (COCODEs), included networks of community health facilitators and TBAs and served as important platforms for community engagement and in narrowing equity gaps. COCODEs also take part in planning for local health emergencies such as emergency transportation of pregnant women to health facilities (3). In addition, actions were taken to ensure that every woman be treated in her preferred language to ensure that treatment and communication procedures were comprehensible and clear for herself and her family (6).

A3: Engaging indigenous communities to address equity gaps in Guatemala



Source: maternal and newborn health coverage database, Unicef/WHO, April 2020 (ENSMI 2009 & 2015).

National trends in selected indicators:

- MMR: 152 (2000) to 96 (2020) per 100 000 live births
- NMR: 21.3 (2000) to 10.8 (2021) per 1 000 live births
- SBR: 19.9 (2000) to 13 (2021) per 1 000 births
- Skilled personnel at childbirth: 41 (ENSMI 2002) to 70 (PAHO database 2017)
- Facility birth: 42 (2002) to 65 (2015)

Sources: Encuesta Nacional de Salud Materno Infantil (ENSMI) Guatemala 2002, 2015; PLISA Health Information Platform; <https://data.unicef.org/topic/maternal-health/delivery-care/> accessed 14 March 2023; United Nations Inter-agency Group for Child Mortality Estimation (2023).

Building on these developments, in 2008, an “Intercultural Health Policy” was issued by the MOH, recognizing the rights of all women, including indigenous women, to access health care that is responsive to their culture, values and traditional practices, which includes respecting and recognizing the role of TBAs.

Finally, local coalitions of TBAs have been recognized by the MOH and Congress for their roles in supporting communities. The MOH adopted specific policies for TBAs and an action plan was formulated in 2020. Congress also approved the decree, *Law for the dignification of TBAs*, which recognizes their role in the health system and in communities and provided for financial remuneration of TBAs for their work in communities.

References

1. The Indigenous World: Guatemala 2020. International Work Group for Indigenous Affairs (IWGIA). (<https://www.iwgia.org/en/guatemala/3622-iw-2020-guatemala.html>, accessed 15 March 2023).
2. Situation of Human Rights in Guatemala. Inter-American Commission on Human Rights. 2017; (<http://www.oas.org/en/iachr/reports/pdfs/Guatemala2017-en.pdf>).
3. Syed U, et al. Advancing maternal and perinatal health in low- and middle-income countries: A multi-country review of policies and programmes. *Frontier Global Women's Health* 2022; 3:909991. doi: 10.3389/fgwh.2022.909991.
4. Gómez N, et al. Pregnancy and childbirth outcomes among indigenous adolescents in Guatemala: a cohort study. *Reproductive Health* 2022 19(1):149.
5. Sistema de consejos de desarrollo SISCODE. ([http://sistemas.segeplan.gob.gt/siscodew/ddpgpl\\$modulo.comunitario](http://sistemas.segeplan.gob.gt/siscodew/ddpgpl$modulo.comunitario), accessed 9 March 2023).
6. Congreso de la República de Guatemala. Decreto 19-2003. Ley de idiomas nacionales. Guatemala: Diario de Centro America; 2003. (https://observatoriop10.cepal.org/sites/default/files/documents/decreto_19_de_2003_idiomas_nacionales_de_guatemala.pdf, accessed 12 March 2023).

A7. Sustaining maternal and newborn health during conflict in Yemen

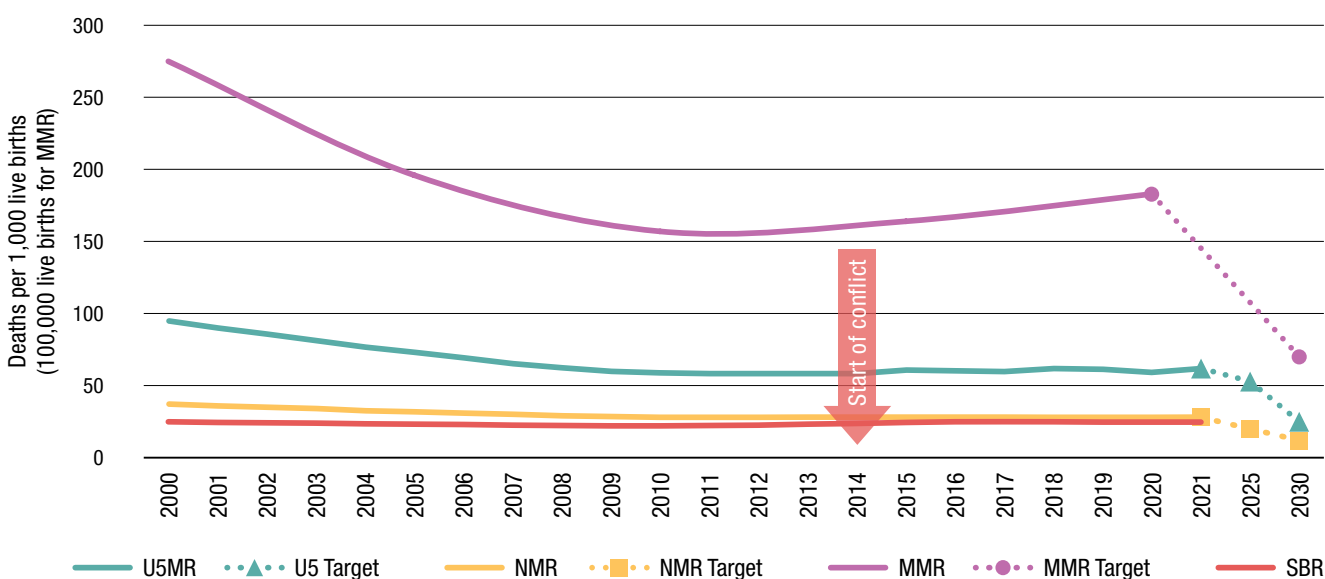
Yemen, facing one of the worst humanitarian crises in the world, is characterized by conflict, population displacement, disruption of service, and widespread food and nutrition insecurity. An estimated 21.6 million of its 32.6 million people (66%) need humanitarian assistance. Of these, 51% are children (1). While policy, strategy and delivery are shared between Ministries of Health in both Aden and Sana'a, political turmoil profoundly impacts all social sectors. Just over half (56%) of the health facilities are fully functional (2) and heavily reliant on external funding. There has been a large exodus of medical professionals because of inadequate job opportunities and the protracted conflict leading to economic collapse of the country. As a consequence, access to and utilization of essential maternal and newborn health services have regressed with only a quarter of pregnant women attending four ANC visits, over half of mothers delivering at home without a skilled birth attendant and the largest number of under-vaccinated and zero-dose children in the region. Children and mothers bear the most burden with at least one child under-five dying every 10 minutes due to preventable causes. According to global estimates, trends in maternal, neonatal and child mortality in Yemen have slowed and reversed gains achieved in previous decades.* A MICS survey in 2023 will provide the clearest evidence of current mortality and the gaps that must be closed to achieve the SDG goals by 2030.

In response to these multiple challenges, the Ministry of Public Health and Population (MOPHP) in Aden and Sana'a works in close collaboration with the United Nations and partners to implement strategies to sustain and expand access to essential care for mothers and children. With limited resources, as well as an insufficient health workforce, hard choices are made daily to prioritize the most essential services. In-country partners coordinate with MOPHP under a National Reproductive Health Inter-Agency Working Group (RIHAWG) to provide strategic and technical support. External funding, largely coordinated outside Yemen due to insecurity, provides critical contributions organized by the World Bank, UK, US, EU, GAVI and other donors through a common financial coordination mechanism. Major initiatives underway include:

Generating data and evidence

WHO supports the MOPHP to conduct the Health Resources and Services Availability Monitoring System (HeRAMS) on annual basis, which helps track the functionality of health facilities, availability of essential services (including MNCH) and availability of resources (including health workers, equipment and supplies). In addition, UNICEF and UNFPA are anticipating that a national Emergency Obstetric Newborn Care (EmONC) needs assessment will be conducted in the near future.

A4: Yemen: Trends in U5MR, NMR, MMR and SBR, 2000-2021



* The under-five mortality rate increased from 42 per 1 000 live births in 2015 when the war erupted, to 62 deaths per 1 000 in 2021; the newborn mortality rate increased from 22 to 28 deaths per 1 000 live births during the same period; the maternal mortality ratio increased from 157 to 183 deaths per 100 000 live births between 2010 and 2020. Sources: United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) *Levels and Trends in Child Mortality 2017* (<https://data.unicef.org/resources/levels-trends-child-mortality-2017/>); *UNIGME Levels and Trends in Child Mortality 2022* (<https://data.unicef.org/resources/levels-and-trends-in-child-mortality/>); *Trends in Maternal Mortality 2000 to 2020* (<https://www.who.int/publications/i/item/9789240068759>); Estimates by WHO, UNICEF, UNFPA, World Bank Group and UNDESA/Population Division.

Improving access to quality care

Channeling resources from the financial coordination mechanism, UNICEF and partners ensure functionality of about 60% (2 700) of the country's Primary Health Care facilities, providing payments to health workers, running costs and essential supplies to deliver a minimum service package. At the community level, UNICEF, UNFPA and CSO partners support a network of 7 000 community midwives to provide essential maternal and newborn care services, as well as a cadre of more than 20 000 community health and nutrition volunteers to promote appropriate and healthy behaviors, including early care seeking.

At the referral (secondary and tertiary) levels, UNICEF supports provision of free and quality referral care for mothers and newborn babies with complications. This is achieved through provision of cash support to hospitals to cover the cost of services to prevent financial barriers to such care, particularly for the poor. To improve quality of care, partners are also piloting a mentorship program through which general practitioners are deployed in PHCs to provide on-job support to satellite PHCs. As a result of all these efforts, in 2022, over 5 million mothers, newborn babies and children received essential services.

Strengthening health systems

Partners continue to build the capacities of health care managers and providers to improve quality of care, while the successful roll out of DHIS2 significantly improves timely availability of administrative/ routine data for action. Over 3 500 PHCs report through DHIS2 with ongoing efforts to scale up the rollout to cover all 4 500 PHCs across the country. Partners also work to strengthen supply chain systems including the introduction of LMIS systems. Remaining key challenges to delivering maternal and newborn health care include:

1. protracted conflict, complex operational environment and shrinking funding opportunities
2. weak health systems and inadequate public financing to sustain the delivery of essential maternal and newborn services at PHC and community levels
3. unreliable data to make evidence-based planning
4. inadequate quality of care leading to suboptimal delivery of low-cost and high-impact interventions to reduce newborn and maternal mortality.

Next Steps

To continue improving MNCH service performance and reverse the losses in maternal and newborn mortality, it is important to mobilize partners and donors to support the following areas:

- Completion of the 2023 Multiple Indicator Cluster Survey (MICS), which will provide the most reliable evidence base of newborn mortality and the gaps that need to be filled to achieve the SDGs
- Finalization of the Reproductive Maternal Newborn Child Health (RMNCH) Strategy
- Revamping the health system to ensure that the current service delivery model addresses major causes of death among mothers and newborns
- Supporting community-based surveillance for maternal and neonatal deaths
- Scaling up PHCs and ensuring that all pre-existing PHCs are fully functional
- Scaling up community platforms/networks of both community midwives (CMWs) and Community Health Workers (CHWs)
- Conducting a national needs assessment of EmONC
- Engaging with local authorities on public financing for health.

References

1. Yemen Humanitarian Needs Overview. December 2023. United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). (<https://data.humdata.org/dataset/yemen-humanitarian-needs-overview>).
2. 2021 Yemen Health Resources and Services Availability Monitoring System (HeRAMS). World Health Organization. (<https://data.humdata.org/dataset/yemen-humanitarian-needs-overview>).

Photo credits:

cover page, Flickr Creative Commons License/Michael Tsegaye/Save the Children;

page iv, Ghana Health Service @Eric Asaana;

page x, © UNICEF/UNI150924/Asselin;

page 2, © WHO/Ala Kheir;

page 12, © UNICEF/UN0377181/Esiebo;

page 16, © UNICEF/Kokoroko;

page 20, Ghana Health Service @Eric Asaana;

page 22, © WHO/Petterik Wiggers;

page 24, © UNICEF/UN0464631/Dejongh.



9789240073678

