Transitioning to midwifery models of care

Global position paper

World Health Organization

UNFPA

unicef
for every child

International
Confederation
of Midwives

BILL & MELINDA
GATES foundation

Burnet
reach for the many

ciane!
COLLECTIF
INTERASSOCIATIF
AUTOUR DE LA
NAISSANCE

COINN
Council of International Neonatal Nurses

jhpiego
Johns Hopkins University Affiliate

IPA
International
Pediatric
Association
Every Child · Every Age · Everywhere

Transitioning to midwifery models of care

Global position paper

World Health Organization

Transitioning to midwifery models of care: global position paper

ISBN 978-92-4-009826-8 (electronic version)
ISBN 978-92-4-009827-5 (print version)

© World Health Organization 2024

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. Transitioning to midwifery models of care: global position paper. Geneva: World Health Organization; 2024. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at https://iris.who.int/.

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.

Cover photography (from the top, clockwise): © UNFPA/Luis Tato, © WHO/Bente Binderup, © WHO/Carlo Bruno Santos, © WHO/Yoshi Shimizu, © UNICEF and Fernandez Foundation Hospital, © WHO/Mwesuwa Ramsey, © ICM/Noriko Hayashi, © ICM/Carla Molina.

Design and layout by Green Ink Publishing Services Ltd.

Contents

Acknowledgements v

Abbreviations viii

Glossary ix

Executive summary xiii

1. Background 1

2. Key terms and definitions 7

2.1 Who is a midwife? 7

2.2 What do midwives do? 8

2.3 What are midwifery models of care? 12

3. The case for midwifery models of care 15

3.1 Midwifery models of care save lives and improve health and well-being of women, newborns, partners, families and communities 15

3.2 Midwifery models of care humanize care and are responsive to the needs of women 16

3.3 Midwifery models of care contribute to a better society and advance human capital in an uncertain world 18

3.4 Midwifery models of care are a cost-effective intervention with potential long-term economic benefits 19

4. Guiding principles of midwifery models of care 21

4.1 Equitable and human-rights-based care enabling access for all women and newborns 22

4.2 Person-centred and respectful care encouraging a trusting relationship and partnership between women and midwives 23

4.3 High-quality care aligned with the midwifery philosophy of care 24

4.4 Care provided and coordinated by autonomous, educated, regulated and supported midwives, in all settings and at all levels of the health system 25

4.5 Integrated care provided within interdisciplinary teams in networks of care 26

5. Conclusion 29

References 30

Annex 1. The International Confederation of Midwives (ICM) philosophy of midwifery care and model of midwifery care 39

Annex 2. Continuity of care and ways to achieve it 40

Wording used in this document

In this global position paper, when referring to pregnancy, childbirth and the postnatal period, the term "women" is also intended to include adolescent girls. The terms "women" and "mothers" are intended to be inclusive of all those who self-identify as women and/or who give birth. While the majority of people who are pregnant or can give birth are cisgender women (who were born and identify as female), our vision is also inclusive of the experiences of transgender men and other gender diverse people who have the reproductive capacity to give birth.

The terminology of health professions are aligned with the current/2008 edition of the International Standard Classification of Occupations (ISCO-08), a publication of the International Labour Organization (ILO).[1] In this global position paper, "midwives" refers to both midwives and nurse-midwives, provided that the nature of the work performed by nurse-midwives aligns with the midwifery tasks specified and listed in ISCO-08, as described in section 2.2 of this document.

1 International Standard Classification of Occupations: ISCO-08. Geneva: International Labour Organization; 2008 (https://isco.ilo.org/en/isco-08/).

Acknowledgements

During its fifth meeting, in May 2022, the World Health Organization (WHO) Strategic and Technical Advisory Group of Experts for Maternal, Newborn, Child and Adolescent Health and Nutrition (STAGE) recommended that WHO should support countries in their transition to midwifery models of care by providing policy advice and implementation guidance. In response, WHO convened a new STAGE working group on midwifery models of care (the STAGE Midwifery Working Group), bringing together key stakeholders to develop guidance on midwifery models of care. This position paper has been drafted by the WHO STAGE Midwifery Secretariat, with support of the STAGE Midwifery Working Group. It has been reviewed by external experts, partners and WHO staff and has been reviewed and endorsed by the WHO STAGE.

The WHO Department of Maternal, Newborn, Child and Adolescent Health and Ageing (MCA) gratefully acknowledges the contributions that many individuals and organizations have made to the development of this global position paper on midwifery models of care.

The WHO MCA Department wishes to acknowledge the members of the WHO STAGE who provided technical input on the content and reviewed and approved the final document: Amanuel Abajobir (African Population and Health Research Center, Ethiopia), Koki Agarwal*[2] (MOMENTUM Country and Global Leadership, the United States of America [the USA]), Rina Agustina (Universitas Indonesia, Indonesia), Nizam Uddin Ahmed (Shastho Shurokkha Foundation, Bangladesh), Fadia AlBuhairan (Health Sector Transformation Program, Saudi Arabia), Shabina Ariff (Aga Khan University, Pakistan), Narendra Kumar Arora* (The INCLEN Trust International, India), Richmond Aryeetey (University of Ghana School of Public Health, Ghana), Per Ashorn (Tampere University, Finland), Peter Azzopardi (University of Melbourne, Australia), Jay Berkley (Kenya Medical Research Institute, Kenya/University of Oxford, the United Kingdom of Great Britain and Northern Ireland), Oliva Bazirete* (University of Rwanda, Rwanda), Cristina Bisson (RTI International, the USA), Gary Darmstadt* (Stanford University School of Medicine, the USA), Kathryn Dewey (University of California, Davis, the USA), Trevor Duke (University of Melbourne, Australia), Faysal El Kak (American University of Beirut, Lebanon), Caroline Homer* (STAGE Chair, Burnet Institute, Australia), Fyezah Jehan (Aga Khan University, Islamic Republic of Pakistan), Caroline Kabiru (African Population and Health Research Center, Kenya), Nuray Kanbur (University of Ottawa, Canada), Betty Kirkwood (London School of Hygiene & Tropical Medicine, the United Kingdom), Jonathan Klein (Stanford University, the USA), Daniel Martinez Garcia (Geneva University Hospital, Switzerland), Sjoerd Postma (Khulisa Management Services, South Africa), Linda Richter (University of the Witwatersrand, South Africa), Jane Sandall* (Co-Chair of the STAGE Midwifery Working Group and King's College, the United Kingdom), Auliya Suwantika (Universitas Padjadjaran, Indonesia), Peter Waiswa (Makerere University School of Public Health, Uganda), Dilys Walker* (University of California San Francisco, the USA) and Stanley Zlotkin (University of Toronto, Canada).

The WHO MCA Department greatly appreciates the roles that the following contributors played in the development of this global position paper. Justine Le Lez (maternal health consultant, WHO headquarters, Switzerland) was the primary author and was the coordinator for the WHO Secretariat for the STAGE Midwifery Working Group. The members of the STAGE Midwifery Working Group provided substantial technical guidance and input to the writing and review of the global position paper; the working group members included: the two co-chairs, Sally Pairman (International Confederation of Midwives [ICM], the Kingdom of the Netherlands) and Jane Sandall (King's College London, the United Kingdom); representatives of women's groups and organizations, Hélène Carrere and Soizic Guérin-Cauet (Collectif Inter-Associatif autour de la Naissance,

2 Names with a * represent WHO STAGE members involved in the STAGE Midwifery Working Group.

France) and Leanne Levers (White Ribbon Alliance, the USA); representatives from the WHO STAGE (indicated with a * in the paragraph above); country nursing advisor, Deepika Cecil Khakha (Ministry of Health and Family Welfare, Government of India, India); representatives of professional associations and nongovernmental organizations, Marina Boykova (Council of International Neonatal Nurses, the USA), Jacqueline Dunkley-Bent (ICM, the Kingdom of the Netherlands), Anne Kihara (International Federation of Gynecology and Obstetrics [FIGO], the USA), Abby Kra-Friedman (International Council of Nurses, Switzerland), Naveen Thacker (International Pediatric Association, the USA) and Patricia Titulaer (Laerdal Global Health, Norway); international expert and scientist, Atf Gherissi (international midwife educator and researcher, Tunisia); and representatives of United Nations funds, Asheber Gaym (United Nations Children's Fund [UNICEF] Regional Office for South Asia, Nepal) and Geeta Lal (United Nations Population Fund [UNFPA] headquarters, the USA). WHO also wishes to acknowledge Elena Ateva (White Ribbon Alliance, the USA), Barbara McPake (Nossal Institute for Global Health, Australia) and Mary Renfrew (University of Dundee, the United Kingdom) – former members of the working group – for their valuable technical expertise. WHO also thanks Sabaratnam Arulkumaran (former STAGE member, St George's University of London, the United Kingdom), Fatima Gohar (UNICEF Eastern and Southern Africa Regional Office, Kenya) and Bo Jacobsson (FIGO, the USA) for their valuable technical contributions during the first meeting of the STAGE Midwifery Working Group.

WHO extends its gratitude to all individuals who initiated this work on midwifery models of care: Fran McConville, Allisyn Moran, Anayda Portela, Georgia Taylor (consultant) (WHO headquarters, Switzerland); and Sarah Bar-Zeev[3] and Anneka Knutsson (UNFPA headquarters, the USA). WHO appreciates all the participants who provided meaningful inputs through their active participation in two online global consultation workshops (held on 3 and 7 December 2021) and a global online survey on midwifery models of care (held in August 2022). Thanks are also due to Georgia Taylor and Lia Brigante, consultants of WHO headquarters, for data analysis.

WHO extends sincere appreciation to the members of the expert group who contributed to the revision of this document for their insightful guidance, listed here in alphabetical order by last name: Kaosar Afsana (BRAC University, Bangladesh), Jennifer Akuamoah-Boateng (Bill & Melinda Gates Foundation, the USA), Roa Altaweli (Princess Nourah bint Abdulrahman University, Saudi Arabia) Annie Atchoumi (Fédération des associations de sages-femmes d'Afrique francophone, Cameroon), Farah Babaey (Ministry of Health and Medical Education, Islamic Republic of Iran), Sarah Bar-Zeev (Burnet Institute, Australia), Ndeye Bigue Ba Mbodji (Association nationale des sages-femmes d'Etat du Sénégal, Senegal), Pontius Bayo (St Mary's Hospital Lacor, Uganda), Malin Bogren (Gothenburg University, Sweden), Lia Brigante (Royal College of Midwives, the United Kingdom), Sheila Clow (University of Cape Town, South Africa), Maria Helena daSilva Bastos (Rede Feminista de Ginecologistas e Obstetras, Brazil), Alison Eddy (New Zealand College of Midwives, New Zealand), Ubah Farah Ahmed (Somali Pediatric Association, Somalia), Mandy Forrester (International Confederation of Midwives, the Kingdom of the Netherlands), Lynn Freedman (Columbia University, the USA), Meena Gandhi (Foreign, Commonwealth and Development Office, the United Kingdom), Yamileth Granizo Román (Comité para la Prevención de la Tortura, Chile), Pandora Hardtman (Jhpiego, the USA), Paridhi Jha (Foundation for Research in Health Systems, India), Inderjeet Kaur (Fernandez Hospital, India), Zuzana Krišková (Women's Circles, Slovakia), Bashi Kumar-Hazard (Human Rights in Childbirth [global organization]), Debrah Lewis (Mamatoto Resource & Birth Centre, Trinidad and Tobago), Margaret Loma Phiri (independent midwife consultant, Malawi), Jody Lori (University of Michigan, the USA), Alison McFadden (University of Dundee, the United Kingdom), Paula Medway (Department for Health and Wellbeing, Government of South Australia, Australia), Berit Mortensen (Oslo Metropolitan University, Norway), Goma Niraula (Midwifery Society of Nepal, Nepal), Geraldine Nyaku (White Ribbon Alliance, Zimbabwe), Jovita Ortiz Contreras (University of Chile, Chile), Loveday Penn-Kekana (London School of Hygiene & Tropical Medicine, the United Kingdom), Bharati Sharma (Indian Institute of Public Health, India), Yoko Shimpuku (Hiroshima University, Japan), Suzanne Stalls (MOMENTUM Country and Global Leadership, the USA), Catharine Taylor (Merck for Mothers, the USA), Sally K. Tracy (University of Sydney, Australia), Jona Turalde (Malaya Center for Sexuality Education, the Philippines) and Alexandra Zuber (Ata Health Strategies LLC, the USA). The WHO MCA Department also appreciates the

3 During the work on this global position paper, this contributor's institutional affiliation changed from UNFPA initially to the Burnet Institute.

initial technical contributions of Robyn Churchill (United States Agency for International Development, the USA) and Cristina Mattison (Karolinska Institute, Sweden). WHO also thanks Annie Oliver (New Zealand College of Midwives, New Zealand) for her support in collating documentation.

The WHO MCA Department also wishes to thank regional and global advisers from UNICEF and UNFPA for their technical contributions to the review of the global position paper: Salwa AlEryani (UNICEF East Asia and Pacific Regional Office, Thailand), Fatima Gohar (UNICEF Eastern and Southern Africa Regional Office, Kenya), Tedbabe Degefie Hailegebriel (UNICEF headquarters, the USA), Tomomi Kitamura (UNICEF West and Central Africa Regional Office, Senegal), Shirley Mark Prabhu (UNICEF Middle East and North Africa Regional Office, Jordan), Catherine Breen Kamkong (UNFPA Asia and the Pacific Regional Office, Thailand), Alejandra Corao (UNFPA Latin America and the Caribbean Regional Office, Panama), Mollie Fair (UNFPA Arab States Regional Office, Egypt), Tamar Khomasuridze (UNFPA Eastern Europe and Central Asia Regional Office, Türkiye), Chisato Masuda and Jean-Pierre Monet (UNFPA headquarters, the USA).

The WHO MCA Department wishes to acknowledge the contributions of WHO colleagues who provided technical support in the review of the document. The contributors from WHO country and regional offices were Julio Pedroza (WHO Country Office, Brazil), Triphonie Nkurunziza (WHO Regional Office for Africa, Republic of Congo), Bremen De Mucio (WHO Regional Office for the Americas/Pan American Health Organization, Latin Center for Perinatology and Women's Health, Uruguay), Mohammed Afifi (WHO Regional Office for the Eastern Mediterranean, Egypt), and Suvajee Good, Rajesh Khanna and Ai Tanimizu (WHO Regional Office for South-East Asia, India). The contributors from WHO headquarters in Geneva, Switzerland, were Amelia Latu Afuhaamango Tuipulotu (WHO Office of the Chief Nurse), Carey McCarthy (WHO Health Workforce Department), Tova Tampe (WHO's Special Programme on Primary Health Care), Ann-Beth Moller (WHO Department of Sexual and Reproductive Health and Research), and Anshu Banerjee, Subha Sri Balakrishnan, Frida Berg, Allisyn Moran, Heather Scott, Beena Varghese, Florence West and Emily Wootton (WHO MCA Department).

Thanks are due the Bill & Melinda Gates Foundation and Merck for Mothers for providing financial support for this project.

Abbreviations

ENAP	Every Newborn Action Plan
EPMM	Ending Preventable Maternal Mortality
HIC	high-income country
ICM	International Confederation of Midwives
ISCO	International Standard Classification of Occupations
LMICs	low- and middle-income countries
NCD	noncommunicable disease
PHC	primary health care
SDG	Sustainable Development Goal
SRHR	sexual and reproductive health and rights
SRMNCAH	sexual, reproductive, maternal, newborn, child and adolescent health
STAGE	Strategic and Technical Advisory Group of Experts for Maternal, Newborn, Child and Adolescent Health and Nutrition
UHC	universal health coverage
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
WHO	World Health Organization

Glossary

Term	Definition
Care coordination	A proactive approach to bringing together care professionals and providers to meet the needs of service users to ensure that they receive integrated, person-focused care across various settings *(1)*.
Collaborative care	Care that brings together professionals or organizations to work in partnership with people to achieve a common purpose *(1)*.
Continuity of care	The degree to which a series of discrete health-care events is experienced by people as coherent and interconnected over time and consistent with their health needs and preferences *(1)*.
Continuum of care	The spectrum of personal and population health care needed throughout all stages of a condition, injury or event throughout a lifetime, including health promotion, disease prevention, diagnosis, treatment, rehabilitation and palliative care *(1)*.
Equity in health	The absence of systematic or potentially remediable differences in health status, access to health care and health-enhancing environments and treatment in one or more aspects of health across populations or population groups defined socially, economically, demographically or geographically within and across countries *(1)*.
Continuity of midwife care models[4]	Midwifery models of care in which a known and trusted midwife, or small group of known midwives, is the main care provider for women and their babies throughout the antenatal period, labour, childbirth and the postnatal period (defined in the present document).
Fragmentation (of health services)	(a) Coexistence of units, facilities or programmes that are not integrated into the health network; (b) the lack of service coverage of the entire range of promotion, prevention, diagnosis, treatment, rehabilitation and palliative care services; (c) the lack of coordination among services in different platforms of care; or (d) the lack of continuity of services over time *(1)*.
High-quality care	Care that is safe, effective, people-centred, timely, efficient, equitable and integrated *(2)*.
Integrated health services	Health services that are managed and delivered so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, coordinated across the different levels and sites of care within and beyond the health sector and according to their needs throughout the life course *(1)*.
Low birth weight	A birthweight less than 2500 g (up to and including 2499 g) *(3)*.
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 *(4)*.

4 Continuity of midwife care models were previously referred to as midwifery-led continuity of care (MLCC) models.

Maternal death	The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management (from direct or indirect obstetric death), but not from unintentional or incidental causes *(3)*.
Midwife[5]	Midwifery professionals plan, manage, provide and evaluate midwifery care services before, during and after pregnancy and childbirth. They provide delivery care for reducing health risks to women and newborn children according to the practice and standards of modern midwifery, working autonomously or in teams with other health care providers. They may conduct research on midwifery practices and procedures and implement midwifery education activities in clinical and community settings *(5)*.[6]
Midwifery models of care	Midwifery models of care are models of care in which the main care providers for women and newborns, starting from pre-pregnancy and continuing all the way through the postnatal period, are educated, licensed, regulated midwives who autonomously provide and coordinate respectful high-quality care across their full scope of practice, using an approach that is aligned with the midwifery philosophy of care, which: (i) promotes a person-centred approach to care; (ii) values the woman–midwife relationship and partnership; (iii) optimizes physiological, biological, psychological, social and cultural processes; and (iv) uses interventions only when indicated. In midwifery models of care, midwives provide integrated care, addressing the needs of each individual woman and newborn, within functional and enabling health systems, equipped with necessary resources and streamlined consultation and referral processes. They collaborate within networks of care as part of interdisciplinary teams characterized by equality, trust and respect. This approach guarantees that every woman and newborn receives personalized care, tailored to their health needs. Midwifery models of care are adaptable to all levels of care and contexts, including home-, community- and hospital-based settings; the public and private sectors and public–private partnerships; resource-constrained environments; and humanitarian and crisis settings. This ensures wide accessibility, equity and relevance across different cultural contexts for women, newborns, partners, families and communities *(defined in the present document)*.

5 In this global position paper, the word “midwives” refers to both midwives and nurse-midwives.
6 The definition used in the International Standard Classification of Occupations (ISCO) classification, published in 2008, will be updated in 2028.

Models of care	A conceptualization of how services should be delivered, including the processes of care, organization of providers and management of services, supported by the identification of roles and responsibilities of different platforms and providers along the pathways of care *(1)*.
Network of care for maternal and newborn health	A collection of public and/or private health facilities and health workers deliberately interconnected to promote multidisciplinary teamwork and collaborative learning in order to provide comprehensive, equitable, respectful, person-centred care from home/community to primary through to tertiary levels *(6)*.
Newborn death	Deaths during the first 28 completed days after a live birth *(7)*.
Person-centred care	Care approaches and practices in which the person is seen as a whole, with many levels of needs and goals, the needs being derived from their personal social determinants of health *(1)*.
Postnatal period	The period beginning immediately after the birth of the baby and extending up to six weeks (42 days) *(8)*.
Preterm birth	A baby born alive before 37 weeks of pregnancy are completed (less than 259 days) *(3)*.
Primary care	The provision of integrated, accessible health-care services by practitioners who are accountable for addressing a large majority of personal health-care needs, developing sustained partnerships with people and practising in the context of the family and community. In some regions, it is also referred to as the first level of care *(1)*.
Primary health care	Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community, through their full participation and at a cost that the community and country can afford to maintain, at every stage of their development in the spirit of self-reliance and self-determination. It is the first level of contact of individuals, the family and community with the national health system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health-care process *(1)*.
Referral	The direction of an individual to the appropriate facility or specialist in a health system or network of service providers to address the relevant health needs. Counter-referral may occur when an individual is referred back to primary care for follow-up care following a procedure in secondary or tertiary care *(1)*.
Small for gestational age	Birth weight below –2 standard deviations of the mean or below the 10th percentile according to local intrauterine growth charts *(3)*.
Stillbirth	The complete expulsion or extraction from a woman of a fetus, following its death prior to the complete expulsion or extraction, at 22 or more completed weeks of gestation. For international reporting it is recommended to report stillbirths of 28 or more completed weeks of gestation *(3)*.

Transitioning to midwifery models of care	Transitioning to midwifery models of care refers to the process of reorientation of health systems away from the currently prevalent fragmented and risk-oriented model of care to a midwifery model of care in which women and newborns, starting from pre-pregnancy and continuing all the way through the postnatal period, receive equitable, person-centred, respectful, integrated and high-quality care, provided and coordinated by midwives working within collaborative interdisciplinary teams *(defined in the present document)*.
Universal health coverage	Ensured access for all people to needed promotive, preventive, resuscitative, curative, rehabilitative and palliative health services, of sufficient quality to be effective, while also ensuring that the use of these services does not expose any users to financial hardship *(1)*.

References for the glossary[7]

1. World Health Organization and the United Nations Children's Fund. Operational framework for primary health care: transforming vision into action. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/337641). Licence: CC BY-NC-SA 3.0 IGO.
2. Continuity and coordination of care: a practice brief to support implementation of the WHO Framework on integrated people-centred health services. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/274628). Licence: CC BY-NC-SA 3.0 IGO.
3. International Classification of Diseases, Eleventh Revision (ICD-11). Geneva: World Health Organization; 2019/2021 (https://icd.who.int/browse11). Licence: CC BY-ND 3.0 IGO.
4. Chou D, Tunçalp Ö, Firoz T, Barreix M, Filippi V, von Dadelszen P et al.; Maternal Morbidity Working Group. Constructing maternal morbidity: towards a standard tool to measure and monitor maternal health beyond mortality. BMC Pregnancy Childbirth. 2016;16:45. (https://doi.org/10.1186/s12884-015-0789-4).
5. International Standard Classification of Occupations. Geneva: International Labour Organization Department of Statistics (ILO STAT); 2008 (https://ilostat.ilo.org/methods/concepts-and-definitions/classification-occupation/).
6. Kalaris K, Radovich E, Carmone AE, Smith JM, Hyre A, Baye ML et al. Networks of care: an approach to improving maternal and newborn health. Glob Health Sci Pract. 2022;10(6):e2200162 (https://doi.org/10.9745/ghsp-d-22-00162).
7. The Global Health Observatory. Neonatal mortality rate (0 to 27 days) per 1000 live births) (SDG 3.2.2). Geneva: World Health Organization; 2024 (https://www.who.int/data/gho/indicator-metadata-registry/imr-details/67).
8. WHO recommendations on maternal and newborn care for a positive postnatal experience. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/352658). Licence: CC BY-NC-SA 3.0 IGO.

7 All references were accessed on 20 May 2024.

Executive summary

Despite significant progress in recent decades, maternal and neonatal mortality, morbidity, and stillbirths remain unacceptably high globally, indicating persistent health inequities. Adolescent pregnancy remains a significant global public health concern, with millions of adolescents facing the challenges of unintended pregnancies each year. Inadequate access to sexual and reproductive health and rights services and commodities for millions of women worldwide, including family planning and safe abortion, contributes to significant global maternal and neonatal mortality and morbidity and stillbirths. The escalating number of people, including pregnant women and newborns, residing in humanitarian or fragile settings, exacerbated by the impacts of climate change, poses significant challenges. Severe medical, psychological, social and economic outcomes stem from people's experiences in these crisis situations, affecting every aspect of the lives and well-being of women, newborns, partners, families and communities.

The majority of maternal and neonatal deaths and stillbirths can be prevented with timely access to high-quality care. While improving access to care is key in mitigating maternal and neonatal mortality, morbidity and stillbirths, poor-quality care is responsible for a greater number of fatalities than lack of access to care in low- and middle-income countries. In these settings, more than 50% of maternal deaths and over 60% of neonatal deaths could be averted with high-quality care. Worldwide, many women and newborns experience mistreatment during pregnancy, childbirth and postnatal care. Overmedicalization of pregnancy and childbirth has escalated in recent decades contributing to further poor quality of care and unfavourable outcomes for women and newborns, and posing a barrier to achieving universal health coverage (UHC).

Under international human rights law, governments are obligated to promote, respect, protect, ensure and uphold the rights of women, newborns, children and adolescents to receive high-quality health care and enjoy the highest standards of health. As a foundational step on the pathway towards UHC, the World Health Organization (WHO) endorses the reorientation of health systems towards primary health care (PHC).[8] This includes the development of models of care that are well suited to the country and local contexts and which advance the principles of promoting comprehensive integrated health services. In the pursuit of providing high-quality health services to improve health and well-being for all in the context of UHC, transitioning to midwifery models of care represents a cost-effective strategy to optimize outcomes for women and newborns with minimal use of unnecessary interventions.

> **"Transitioning to midwifery models of care" refers to the process of reorientation of health systems away from the currently prevalent fragmented and risk-oriented model of care to a midwifery model of care in which women and newborns, starting from pre-pregnancy and continuing all the way through the postnatal period, receive equitable, person-centred, respectful, integrated and high-quality care, provided and coordinated by midwives working within collaborative interdisciplinary teams.**

8 WHO differentiates primary health care – a whole-of-society approach to health – from primary care, which is the first-contact with health services that are people-centred, continuous, comprehensive and coordinated.

Midwifery models of care: definition

Midwifery models of care are models of care in which the main care providers for women and newborns, starting from pre-pregnancy and continuing all the way through the postnatal period, are educated, licensed, regulated midwives who autonomously provide and coordinate respectful, high-quality care across their full scope of practice, using an approach that is aligned with the midwifery philosophy of care, which:

i. promotes a person-centred approach to care;

ii. values the woman–midwife relationship and partnership;

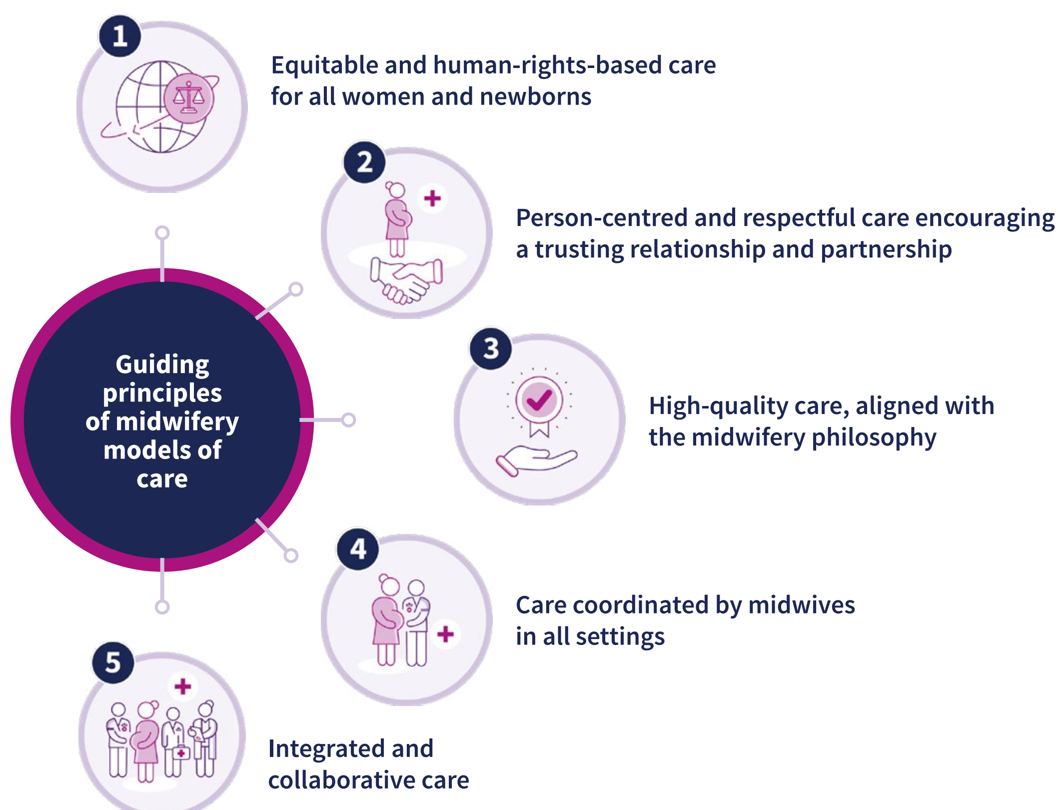
iii. optimizes physiological, biological, psychological, social and cultural processes; and

iv. uses interventions only when indicated.

In midwifery models of care, midwives provide integrated care, addressing the needs of each individual woman and newborn, within functional and enabling health systems, equipped with necessary resources and streamlined consultation and referral processes. They collaborate within networks of care as part of interdisciplinary teams characterized by equality, trust and respect. This approach guarantees that every woman and newborn receives personalized care, tailored to their health needs.

Midwifery models of care are adaptable to all levels of care and contexts, including home-, community- and hospital-based settings; the public and private sectors and public–private partnerships; resource-constrained environments; and humanitarian and crisis settings. This ensures wide accessibility, equity and relevance across different cultural contexts for women, newborns, partners, families and communities.

Guiding principles of midwifery models of care



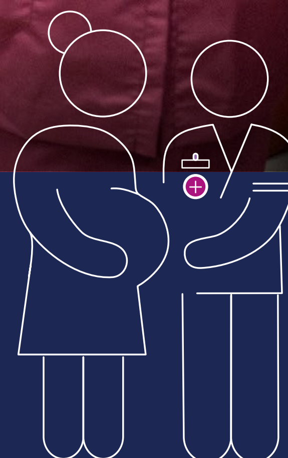
Considering the pressing necessity to safeguard and enhance the lives and well-being of women and newborns, implementing midwifery models of care offers a way to:

- save lives;
- improve women's and newborns' short-, medium- and long-term outcomes, therefore ensuring healthier future generations;
- significantly enhance satisfaction with care and the experience of care for women, aligning with public demand for high-quality care;
- enable women to make informed health decisions, contributing to their overall autonomy in decision-making and their ability to fully enjoy their sexual and reproductive health and rights;
- support healthy and physiological processes and use interventions only when indicated, thereby reducing the negative outcomes and the financial burden associated with unnecessary medical procedures;
- advance public health in countries and reduce health inequities, contributing to a healthier and more equitable society;
- enhance access to health services in countries, addressing critical gaps in the health system and its capacity to meet population needs;
- embody the commitment to women's health and rights, acknowledging and addressing the specific health and well-being needs of women; and
- maximize the efficiency of resource allocation, ensuring public funds are invested in the most effective and impactful maternal and newborn health-care practices.

A woman is supported to breastfeed by a midwife in the Democratic Republic of the Congo. © UNFPA

1

A pregnant woman is shown pre-delivery exercises to relieve her labour pains in India. © UNICEF India



1. Background

Despite significant progress in recent decades, maternal mortality and morbidity remain unacceptably high globally *(1)*. In 2020, an estimated 287 000 women lost their lives due to complications related to pregnancy, childbirth or the postnatal period *(1)*. In addition, in 2015, there were an estimated 27 million direct morbid episodes of the most common obstetric complications: haemorrhage, hypertensive disorders, sepsis and complications of unsafe abortion *(2)*. Mental health issues, including anxiety and depression during the perinatal period, affect approximately 1 in 10 women in high-income countries (HICs) and 1 in 5 in low- and middle-income countries (LMICs) *(3)*. These mental health issues can lead to suicide, which is becoming one of the leading causes of mortality during pregnancy and up to one year after birth in HICs *(4–7)*. Severe medical, psychological, social and economic consequences *(8–12)* and medium- to long-term adverse outcomes stem from maternal mortality and morbidity, affecting every aspect of the lives and well-being of women, infants, partners, families and communities *(12–14)*.

Sexual and reproductive health and rights (SRHR) are an essential component of universal health coverage (UHC). However, SRHR services remain inaccessible in numerous countries. Around the world, there are 164 million women with unmet need for family planning and, in some regions, less than half of the demand for family planning is satisfied *(15)*. Additionally, 3 out of every 10 pregnancies result in induced abortion, 45% of which are deemed unsafe *(16)*. These unsafe abortions account for an estimated 4.7–13.2% of maternal deaths and contribute to increased morbidity among surviving women *(16–18)*.

Neonatal mortality also remains extraordinarily high globally, with an estimated 6300 neonatal deaths occurring daily, the majority of which occur within the first week of life *(19)*. Neonatal conditions (including, for example, preterm birth complications, birth asphyxia, birth trauma, neonatal sepsis and infections) collectively rank as the fifth leading cause of death across all age groups worldwide and as the leading cause

A woman receives midwifery care during pregnancy in the Lao People's Democratic Republic. © UNFPA

A woman, internally displaced due to conflict, and her midwife during an antenatal care visit in the Democratic Republic of the Congo. © UNFPA

in low-income countries *(20)*. Neonatal morbidity is also significantly high globally: in 2020, an estimated 13.4 million newborns were born preterm *(21)* and an estimated 19.8 million had low birth weight *(22)*. Neonatal conditions, primarily preterm birth and low birth weight, are the leading contributors to disability-adjusted life years *(20)*, under-five child mortality *(19,23)* and neonatal mortality and morbidity globally *(19)*. These conditions have the potential to result in lifelong disabilities *(24,25)* and long-term adverse outcomes *(24,25)*, thereby intensifying the burden of noncommunicable diseases (NCDs) *(26–28)*. Breastfeeding is one of the key interventions that can reduce child mortality and NCDs later in life *(29)*, but only 47% of newborns initiate breastfeeding within the first hour of life and only 67% are exclusively breastfed in the first two days after birth *(30)*.

Despite the tragic reality of over 2 million babies dying in utero annually, the issue of stillbirths remains nearly invisible. Globally, an estimated 5200 stillbirths occur daily (babies who die after 28 weeks of pregnancy, either before or during labour/childbirth), with 40% of these deaths occurring during labour *(31)*. As the 2022 report of the United Nations Inter-agency Group for Child Mortality Estimation highlights, “these deaths remain hidden behind a shroud of silence fuelled by stigma, taboo and the misconception that nothing can be done to prevent them” *(31)*.

Maternal and neonatal mortality and morbidity and stillbirths are not evenly or randomly distributed around the globe or within countries – they are a significant indicator of health inequities *(8)*. The great majority of maternal and newborn deaths and stillbirths occur in sub-Saharan Africa and southern Asia, with sub-Saharan Africa alone accounting for approximately 70% of global maternal deaths, 46% of newborn deaths and 77% of stillbirths *(1,19,31)*. Other major factors contributing to inequities in the risks for maternal and newborn deaths and stillbirths are sex, gender and ethnicity of the woman and baby, and the woman’s education level, employment status, income level, disability, sexual orientation and age *(1,32)*.

Adolescent pregnancy remains a significant global public health concern. In 2019, an estimated 21 million pregnancies were reported among adolescents aged 15–19 years in LMICs, with approximately half of these pregnancies being unintended, and 55% of unintended pregnancies ending in abortions, which are often unsafe *(33)*. Globally, complications arising from pregnancy and childbirth are leading causes of mortality

among girls aged 15–19 *(34)*. Adolescent mothers aged 10–19 are at increased risk of complications such as haemorrhage, sepsis, hypertensive disorders and obstructed labour, and their babies are more likely to be born preterm and/or with low birth weight *(34)*.

Globally, there are unprecedented numbers of people living in humanitarian or fragile settings, forcibly displaced and/ or stateless *(35,36)*. In 2017 alone, 630 million women and children either lived close to conflict areas or had been forcibly displaced *(37)*. In crisis settings, women and newborns are particularly vulnerable *(35,38)* and armed conflicts are associated with substantial and persistent excess maternal and child deaths globally *(39)*. Climate change is contributing to humanitarian crises around the globe *(35)* and climate-related disasters have almost tripled over the past decade *(40)*. The numbers of people and the conditions in such settings significantly impede the advancement towards achieving global goals and objectives for health and well-being, notably the targets aimed at reducing maternal and neonatal mortality and stillbirths *(1)*.

However, the majority of maternal and neonatal deaths and stillbirths can be prevented with timely access to high-quality care *(1,19,31)*. Delays in access to the necessary care are associated with avoidable deaths and health complications in women and newborns, as well as stillbirths, and this is often described as "too little, too late" *(1,41)*. Globally, many women and adolescent girls still do not benefit from at least four antenatal contacts with a health worker and continue to give birth without access to a health facility and/or without the provision of care by skilled health personnel, and many of them and/or their newborns do not have any postnatal contact with a health worker within two days of birth *(42)*. Inequities and disparities in access to care are notably prevalent worldwide, with specific groups such as rural populations, adolescent girls and those in the lowest income quintiles facing the most difficulties with access *(42)*. Obstetric fistula, for example, is a deeply inequitable childbirth complication resulting from a lack of timely access to emergency caesarean section during obstructed labour *(43)*. It predominantly impacts the most disadvantaged and vulnerable women and leads to severe medical, psychological, social and economic distress for the women affected, in addition to the obstructed labour resulting in stillbirths in 90.1% of these cases *(43)*.

While improving access to care is key in mitigating maternal and neonatal mortality, morbidity and stillbirths, poor-quality care is responsible for a greater number of fatalities than lack of access to care in LMICs *(44)*. The Lancet Global Health Commission on High Quality Health Systems in the Sustainable Development Goal (SDG) era estimates that 1 million newborn deaths and 150 000 maternal deaths could be saved annually with high-quality care *(44)*. Yet, many settings are unable to provide high-quality maternal and newborn care, based on the World Health Organization (WHO) standards, primarily due to an absence of person-centred care *(45,46)*; a dearth of competent, motivated human resources; unavailability of essential physical resources, such as life-

A woman receives counselling from a midwife about modern family planning methods available at a health facility in a Rohingya refugee camp in Bangladesh. © UNFPA

saving commodities; gaps in care provision; and serious deficiencies in the care experience *(47–49)*. Globally, many women and newborns experience mistreatment during pregnancy, childbirth and postnatal care; there is evidence of this from studies in LMICs *(48,50)* and HICs *(50–53)*, as well as from studies including countries of all income levels *(45,54,55)*. Disrespect and abuse may stem from individual health worker actions, from structural and systemic issues leading to disrespectful care, or from both. This encompasses verbal, physical and/or sexual abuse; stigma and discrimination; failure to meet professional standards of care; poor rapport between women and providers; and inadequate care based on health system conditions and constraints *(45,48,54–57)*. These forms of mistreatment can have serious consequences for the health and well-being of women and newborns, potentially leading to an increased risk of anxiety and postnatal depression, a diminished sense of autonomy and a decreased likelihood of using health services in the future *(45,52,58)*.

Recent decades have brought an escalation in the overmedicalization of pregnancy and childbirth – a global trend described as "too much, too soon" *(41)*. This practice involves the inappropriate, unnecessary or routine use of interventions without there being a clear need for them, based on the condition of the woman or her newborn. Frequently over-used interventions include, for example, episiotomies, amniotomies, induced labour, unnecessary caesarean sections and suctioning of clear amniotic fluid from newborns at birth *(48,59–61)*. Overmedicalization can result in adverse health outcomes *(41,59–65)* and can undermine women's inherent ability to give birth, leaving them feeling sidelined in their birthing process, which negatively affects their childbirth experience *(41,59,66)*. By overburdening already strained health workers, overmedicalization can also result in poor quality of care and immediate, medium- and/or long-term unfavourable health outcomes for women and newborns *(41,59,62,63,66,67)*. It also increases the financial demands on health systems *(67)* and out-of-pocket health expenditures for women and their families *(68–71)*, which poses a barrier to achieving UHC.

When used appropriately, access to caesarean sections saves lives. However, performing medically unnecessary caesarean sections leads to a rise in adverse outcomes for women and newborns worldwide *(61,66)* and generates significant extra costs for health systems *(61,72)*. In 2010 alone, the global expenditure attributed to the overuse of caesarean sections was estimated to be around 2.32 billion US dollars, according to a WHO report *(67)*. This medical intervention further leads to substantial financial hardship for women and families, either due to the high cost paid out of pocket or due to negative impacts of the caesarean section on their health and well-being *(68–71)*; this negatively impacts health equity *(67)* and increases the likelihood of dragging them into (or further into) poverty.

Under international human rights law, governments are obligated to promote, respect, protect, ensure and uphold the rights of women, newborns, children and adolescents to receive high-quality health care and enjoy the highest standards of health *(73)*. The Every Newborn Action Plan (ENAP) and Ending Preventable Maternal Mortality (EPMM) initiatives foster country ownership and promote partnerships at global, regional and country levels for implementation and monitoring of complementary strategies – unique to maternal and newborn health – to strengthen programme planning, tracking of progress and sharing of best practices *(74,75)*. These strategies are aimed at enhancing the quality of care provided to women and newborns and supporting the attainment of UHC for comprehensive sexual, reproductive, maternal and newborn health care *(74,75)*.

As a foundational step on the pathway towards UHC, WHO endorses the reorientation of health systems towards primary health care (PHC).[9] As defined in the 2018 Astana Declaration *(76)* and further outlined in the 2020 WHO–UNICEF *Operational framework for primary health care (77)*, PHC represents the most inclusive, equitable, cost-effective and efficient strategy to enhance people's physical and mental health and well-being, and achieve UHC. One of the levers outlined by the WHO–UNICEF operational framework includes the development of models of care that are well suited to the country and local contexts and which advance the principles of promoting comprehensive integrated health services *(77)*. As one of the minimum policy and strategy requirements for a PHC approach for women's, children's and adolescents' health and well-being, the

[9] WHO differentiates primary health care – a whole-of-society approach to health – from primary care, which is the first-contact with health services that are people-centred, continuous, comprehensive and coordinated.

WHO Strategic and Technical Advisory Group of Experts for Maternal, Newborn, Child and Adolescent Health and Nutrition (STAGE) recommends to "increase [the] frequency and quality of antenatal and postnatal care, improve intrapartum care (including emergency care) delivered through models of midwifery ... care" *(78)*.

In the pursuit of providing high-quality health services to improve health and well-being for all in the context of UHC, transitioning to midwifery models of care represents a cost-effective strategy to optimize outcomes for women and newborns with minimal use of unnecessary interventions *(79–85)*. "Transitioning to midwifery models of care" refers to the process of reorientation of health systems away from the currently prevalent fragmented and risk-oriented model of care to a midwifery model of care in which women and newborns, starting from pre-pregnancy and continuing all the way through the postnatal period, receive equitable, person-centred, respectful, integrated and high-quality care, provided and coordinated by midwives working within collaborative interdisciplinary teams.

Despite growing interest, there is no internationally accepted definition of "midwifery models of care". This global position paper seeks to address this void by offering an international definition, describing the guiding principles of midwifery models of care and reviewing the advantages of adopting these models of care. While the scope of practice for midwives includes broader aspects of sexual, reproductive, maternal, newborn, child and adolescent health (SRMNCAH), this document focuses on midwives' impact in the areas of maternal and newborn health. It acknowledges the significant role and impact that midwives can have within health systems, while recognizing the importance of collaborative and integrated care where various professionals jointly contribute to providing high-quality maternal and newborn health services.

A woman receives antenatal care from a midwife in a birth centre in Canada. © Ashley Marston/ICM

2

A midwife supports displaced women and girls in the province of Ituri in the Democratic Republic of the Congo. © UNFPA DRC/Junior Mayindu.

2. Key terms and definitions

2.1 Who is a midwife?

The current/2008 edition of the International Standard Classification of Occupations (ISCO-08), a publication of the International Labour Organization (ILO) statistics department, provides the following definition[10] of midwifery professionals *(86)*:

> **Midwifery professionals plan, manage, provide and evaluate midwifery care services before, during and after pregnancy and childbirth. They provide delivery care for reducing health risks to women and newborn children according to the practice and standards of modern midwifery, working autonomously or in teams with other health care providers. They may conduct research on midwifery practices and procedures and implement midwifery education activities in clinical and community settings.**

The National Health Workforce Accounts (NHWA) platform uses the ISCO-08 definitions and classifications as a framework with which to monitor and report information on the health workforce, and asks countries to allocate health workers to specific occupation groups as defined by ISCO *(87)*. In some countries, there are health workers who hold a dual qualification as both a nurse and a midwife and are referred to as "nurse-midwives" *(88,89)*. The distinction between these professions should be made based on the nature of the work performed and not on the educational path to become nurses and/or midwives, as outlined in ISCO-08 *(86)*:

> **The distinctions between nursing and midwifery professionals ... should be made on the basis of the nature of the work performed in relation to the tasks specified in this definition and in the relevant unit group definitions. The qualifications held by individuals or that predominate in the country are not the main factor in making this distinction, as training arrangements for nurses and midwives vary widely between countries and have varied over time within countries.**

In this global position paper, "midwives" refers to both midwives and nurse-midwives, provided that the nature of the work performed by nurse-midwives aligns with the midwifery tasks specified and listed in ISCO-08 *(86)*, as described in the next section.

Midwives can be individuals of any gender.

10 The definition used in the ISCO classification, published in 2008, will be updated in 2028.

2.2 What do midwives do?

Midwives are health workers specialized in supporting healthy and physiological processes of both women and newborns throughout the continuum of care, ranging from pre-pregnancy through to the end of the postnatal period; depending on the context and needs, the care they provide may potentially extend beyond the postnatal period.

Midwives practise with a philosophy of care that *(79)***:**

- **promotes a person-centred approach to care;**
- **values the woman–midwife relationship and partnership;**
- **optimizes physiological, biological, psychological, social and cultural processes; and**
- **uses interventions only when indicated.**

When fully educated and licensed, well integrated into health systems and working in an enabling environment, midwives – with the support of interdisciplinary teams – could meet about 90% of the global need for essential SRMNCAH interventions *(89)*.

Midwives have a broad scope of practice, including *(79,86,90,91)*:

- providing health education and information (health promotion) for women, partners and families;
- assessing the health and well-being status and needs of women and babies;
- screening for risk factors and at-risk behaviour;
- leading care planning in collaboration with women;
- promoting physiological pregnancy, labour, childbirth and postnatal period;
- providing essential newborn care and some special newborn care interventions;
- prescribing, dispensing and administering medicines or products; and
- ordering, performing and interpreting laboratory and/or imaging screening tests.

Midwives' specific tasks, as stated in the ISCO-08, consist of:

- planning, providing and evaluating care and support services for women and babies before, during and after pregnancy and childbirth, according to the practice and standards of modern midwifery care;
- providing advice to women and families and conducting community education on health, nutrition, hygiene, exercise, birth and emergency plans, breastfeeding, infant care, family planning and contraception, lifestyle and other topics related to pregnancy and childbirth;
- assessing progress during pregnancy and childbirth, managing complications and recognizing warning signs requiring referral to a medical doctor with specialized skills in obstetrics;
- monitoring the health status of newborns, managing complications and recognizing warning signs requiring referral to a medical doctor with specialized skills in neonatology;
- monitoring pain and discomfort experienced by women during labour and delivery and alleviating pain using a variety of therapies, including the use of painkilling drugs;
- reporting births to government authorities to meet legal and professional requirements;
- conducting research on midwifery practices and procedures and disseminating findings, such as through scientific papers and reports; and
- planning and conducting midwifery education activities in clinical and community settings *(86)*.

Midwives are responsible and accountable for their own decisions and actions, provided the situation remains within their scope of practice *(91)*. They have the necessary competencies to analyse situations, assess risks in women and newborns, and make informed decisions. They are competent to detect complications early and provide lifesaving interventions, such as basic emergency obstetric and newborn care. If women and/or newborns require more complex care and/or specialized interventions which fall outside of their scope of practice, then midwives will consult with specialist medical practitioners – such as obstetricians, paediatricians and/or anaesthesiologists – to jointly provide the best care possible to women and/or newborns, as part of interdisciplinary teams *(79,91)*. Should the situation stabilize and return to a healthy state, midwives resume their role as the main care provider and coordinator while still engaging in collaborative efforts with other health workers. Throughout the continuum of care, women and newborns are at the centre of the care, which is tailored to their needs. Health workers actively encourage women's participation and enable them to collaboratively manage their own care through informed decision-making.

Given that there is a fine line between a healthy and a pathological situation during the continuum of care, it is critical to have professional trust, reciprocal communication, seamless coordination and collaboration, and shared understanding and definition of roles and responsibilities among midwives and other health workers (e.g. obstetricians, paediatricians, nurses); this will ensure high-quality, respectful and person-centred maternal and newborn care. Whenever women and/or newborns require care that is outside of midwives' scope of practice, midwives will communicate – after receiving the woman's consent – essential information to the health professional who will provide that care.

The International Confederation of Midwives (ICM) also provides a definition and scope of practice of a midwife (Box 2.1). See Annex 1 for ICM's philosophy of midwifery care and model of midwifery care.

A midwife talks to patients about basic maternal health at Family Health House in Shiber district of Bamiyan, Afghanistan. © UNFPA

Box 2.1 Definition and scope of practice of a midwife, from the International Confederation of Midwives (ICM)

Definition:

"A midwife is a person who has successfully completed a midwifery education programme based on the ICM Essential Competencies for Midwifery Practice[11] and the framework of the ICM Global Standards for Midwifery Education, recognised in the country where it is located; who has acquired the requisite qualifications to be registered and/or legally licensed to practise midwifery and use the title 'midwife', and who demonstrates competency in the scope of practice of the midwife."

Scope of practice:

"The midwife is recognised as a responsible and accountable professional, who works in partnership with women to give the necessary support, care and advice during pregnancy, labour and the postpartum period, to conduct births on the midwife's own responsibility and to provide care for the newborn and infant. This care includes preventative measures, the promotion of normal birth, the detection of complications in mother and child, the accessing of medical care or other appropriate assistance and the carrying out of emergency measures.

"The midwife has an important task in health counselling and education, not only for the women and gender-diverse people they serve, but also within families and communities. This work should involve antenatal education and preparation for parenthood and may extend to sexual and reproductive health care and care for infants and young children."

"A midwife may practise in any setting including the home, community, hospital, clinic or health unit."

Source: ICM, 2023 *(90)*.

Midwifery students in Bangladesh. © UNFPA

11 The ICM essential competencies for midwifery practice are currently being revised and updated.

A woman receives breastfeeding support from a midwife in the postnatal period in Uzbekistan. © WHO Malin Bring/WHO Uzbekistan

Midwives also play a pivotal role in many other areas of health care, encompassing:

- family planning;
- immunization;
- early childhood development;
- nutritional interventions (e.g. promoting early initiation of breastfeeding, offering counselling on nutrition);
- obstetric and/or gynaecological ultrasound scans;
- preventative health education, screening, management and referral for HIV/AIDS and sexually transmitted infections;
- pelvic floor rehabilitation;
- comprehensive sexuality education; and
- prevention and detection of gender-based violence and abuse, and care for survivors *(91)*.

Depending on the specific contexts and needs in different countries and settings, the scope of practice for a midwife may also incorporate comprehensive abortion care and/or screening and preventative health education for gynaecological cancers and/or female genital mutilation *(16,91)*.

Not all aspects of the health services mentioned above would usually be provided by midwives; their involvement varies and they may be operating as part of a broader interdisciplinary team effort along with community health workers, nurses, auxiliary health professionals, health-care assistants, medical assistants and general or specialist medical practitioners. This interdisciplinary collaboration allows for a seamless integration of services, tailored to the specific needs of women, their partners, newborns, children, adolescents, families and communities, ensuring that they receive the most comprehensive care possible in diverse contexts and settings.

2.3 What are midwifery models of care?

WHO defines models of care as:

> **a conceptualization of how services should be delivered, including the processes of care, organization of providers and management of services supported by the identification of roles and responsibilities of different platforms and providers along the pathways of care *(77)*.**

The definition of midwifery models of care, as developed for this global position paper, is provided in Box 2.2.

Box 2.2 Midwifery models of care: definition

Midwifery models of care are models of care in which the main care providers for women and newborns, starting from pre-pregnancy and continuing all the way through the postnatal period, are educated, licensed, regulated midwives who autonomously provide and coordinate respectful, high-quality care across their full scope of practice, using an approach that is aligned with the midwifery philosophy of care, which:

i. promotes a person-centred approach to care;

ii. values the woman–midwife relationship and partnership;

iii. optimizes physiological, biological, psychological, social and cultural processes; and

iv. uses interventions only when indicated.

In midwifery models of care, midwives provide integrated care, addressing the needs of each individual woman and newborn, within functional and enabling health systems, equipped with necessary resources and streamlined consultation and referral processes. They collaborate within networks of care as part of interdisciplinary teams characterized by equality, trust and respect. This approach guarantees that every woman and newborn receives personalized care, tailored to their health needs.

Midwifery models of care are adaptable to all levels of care and contexts, including home-, community- and hospital-based settings; the public and private sectors and public–private partnerships; resource-constrained environments; and humanitarian and crisis settings. This ensures wide accessibility, equity and relevance across different cultural contexts for women, newborns, partners, families and communities.

A range of midwifery models of care exist and are implemented around the world *(92,93)*, depending on the context and needs. "Continuity of midwife care" models[12] are the most well known type of midwifery models of care. In these models, a known and trusted midwife, or a small group of known midwives, provides care to a woman and her baby throughout the antenatal, intrapartum and postnatal periods.

This continuity encompasses a continuous and supportive process of care and emotional support during pregnancy, labour and childbirth and over the weeks that follow *(94,95)* and ensures interpersonal (relational), longitudinal, management and informational continuity (see Annex 2), thereby providing more personalized and integrated care *(80,96)*.

12 Continuity of midwife care models were previously referred to as midwifery-led continuity of care (MLCC) models.

Continuity of midwife care models are mostly referred to as “caseload midwifery”, “midwifery-led continuity” or “team/midwifery group practice” in the literature *(92)*. They have been recommended by WHO in settings with well functioning midwifery programmes *(59,64,65)*, based on the concept of continuity of care and on the results of a systematic review published in 2016, which included 17 674 women, mostly from HICs, and compared women who received care under a continuity of midwife care model to those who received care under one of the following three approaches *(80)*.[13]

- **Obstetrician-provided care** – obstetricians are the main care provider for most childbearing women and when an obstetrician (not necessarily the one who provides antenatal care) is present for the birth, and nurses provide intrapartum and postnatal care.
- **Family doctor-provided care** – a family doctor or generalist medical practitioner is the main care provider, with referrals to specialist obstetric care as needed, and a medical doctor is present for the birth. Obstetric nurses or midwives provide intrapartum and immediate postnatal care but they do not participate at a decision-making level and they are not involved throughout the entire care episode.
- **Shared models of care** – responsibility for the organization and delivery of care is shared between different health workers, from the first antenatal consultation all the way through the postnatal period *(80)*.

A midwife measures a pregnant woman’s blood pressure in a birthing clinic in Guatemala. © ICM/Carla Molina

13 This systematic review was updated in 2024 and the updated results are presented in Chapter 3.

3

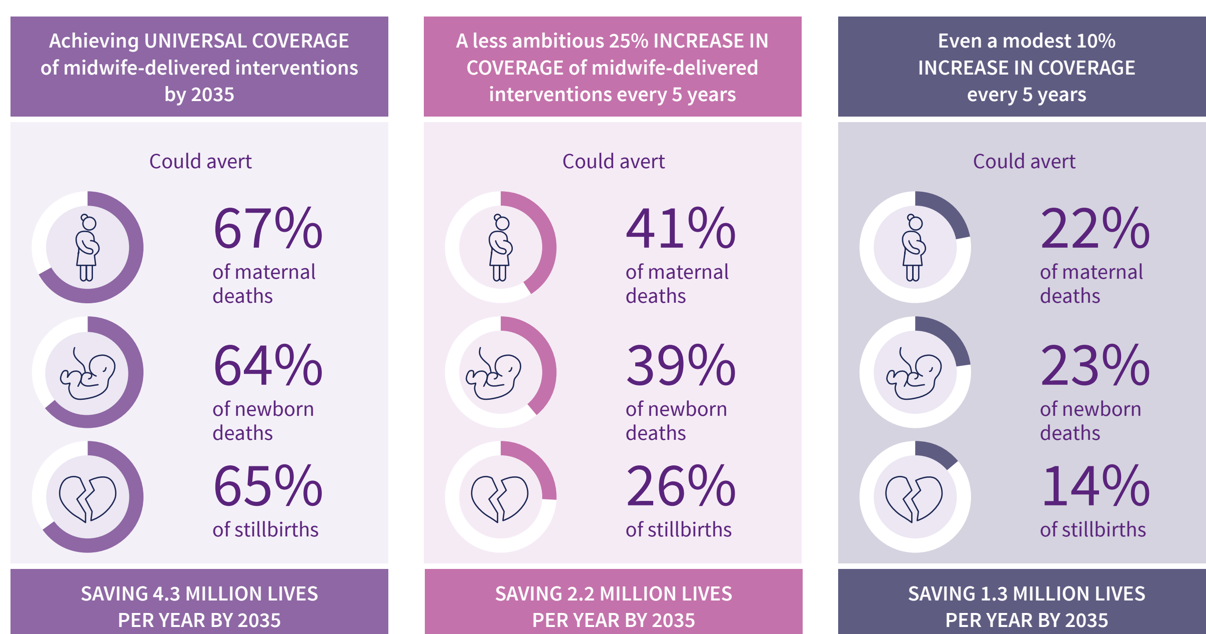
A woman holding her newborn with the support of a midwife at Banadir Hospital in Mogadishu, Somalia. © UNFPA/Luis Tato

3. The case for midwifery models of care

3.1 Midwifery models of care save lives and improve health and well-being of women, newborns, partners, families and communities

Midwives save lives. More than 60% of all maternal and neonatal deaths and stillbirths could be averted by achieving universal coverage of midwife-delivered interventions by 2035, including the provision of family planning before conception,[14] according to a recent modelling study (Fig. 3.1) *(97)*. This represents 4.3 million lives of women and newborns that could be saved each year *(97)*. Even a modest 10% increase in coverage every five years by 2035 could save 1.3 million lives annually *(97)*.

Fig. 3.1 Reductions to maternal and neonatal mortality and stillbirths that are anticipated with an increase in the coverage of midwife-delivered interventions by 2035



Source: UNFPA, 2020 *(98)*, adapted from Nove et al., 2021 *(97)*. Reproduced with permission.

Over 50 short-, medium- and long-term outcomes in women and newborns could be improved by high-quality midwifery care, including reduced maternal and neonatal morbidities, thereby ensuring healthier future generations *(79)*. Implementation of midwifery models of care can tackle the root causes of adverse maternal and newborn health outcomes across various groups and environments, and advance public health in countries.

14 It should be noted that family planning is part of midwives' scope of practice, but midwifery models of care only cover the period from pre-pregnancy until the end of the postnatal period.

An updated systematic review, encompassing data for 18 533 women who participated in randomized trials, mostly from HICs, revealed that women receiving care under a continuity of midwife care model were more likely to experience a spontaneous vaginal delivery and a positive birth experience, and less likely to experience instrumental vaginal birth, episiotomy or caesarean section compared with those who received obstetrician-provided care, family doctor-provided care or care provided within a shared model of care *(99)*.

Midwifery models of care support healthy and physiological processes and use interventions only when indicated, thereby reducing negative outcomes and the financial burden associated with unnecessary medical procedures. Further studies have indeed demonstrated a significant impact of continuity of midwife care, including a reduced likelihood of unnecessary medical interventions during labour and childbirth *(79,99–101)*, a decrease in caesarean section rates *(99,102)*, a potential decrease in anxiety and postpartum depression *(103)* and an increase in the initiation and duration of breastfeeding and family planning use *(79)*. Women subjected to routine episiotomies, instrumental births and caesarean sections, and those who suffer from postnatal depression, may experience medium- to long-term medical, psychological, social and economic consequences *(13,62,66)*; these impairments can potentially impact future pregnancies and also jeopardize the mother–baby relationship *(13)*. Continuity of midwife care can reduce these negative impacts, which have profound repercussions on the lives and well-being of women, families and communities, and also significantly increase costs for women and their families and for already strained health systems *(67)*.

In midwifery models of care, midwives are competent and play a critical role in preventing, screening, detecting and managing both communicable diseases (e.g. malaria, HIV/AIDS, sexually transmitted infections) and noncommunicable diseases (NCDs) (e.g. hypertensive disorders, diabetes mellitus, cervical or breast cancer, mental health issues) in the women and newborns under their care. Pregnancy is associated with increased severity of infectious diseases, which can lead to adverse outcomes in women, fetuses, newborns and infants, such as prematurity, low birth weight, stillbirth and congenital anomalies. NCDs are the leading cause of mortality globally *(20)* and one of the leading causes of maternal mortality in HICs *(4,6,7)*. Midwives are well positioned to promote and foster healthy behaviours in women, their partners and families. The antenatal and postnatal periods together present an opportune window to encourage healthy behaviours and self-care, such as stopping smoking and other tobacco use and avoiding exposure to second-hand smoke, increasing physical activity, reducing alcohol consumption, adopting a healthy diet and safer sex behaviours, and improving vaccination uptake *(104)*. Conditions during pregnancy, events in early life and exposure to environmental toxins while in utero can predispose individuals to lifelong disabilities *(24,25)*, obesity, high blood pressure, heart diseases and diabetes *(105–107)*, thereby increasing the risk of chronic diseases later in life for both the woman and her child *(107–109)*. Some interventions provided by midwifery care, such as support to women for exclusive breastfeeding, mitigate the risks of women and newborns suffering from NCDs later in life, therefore ensuring healthier future generations *(29,91)*.

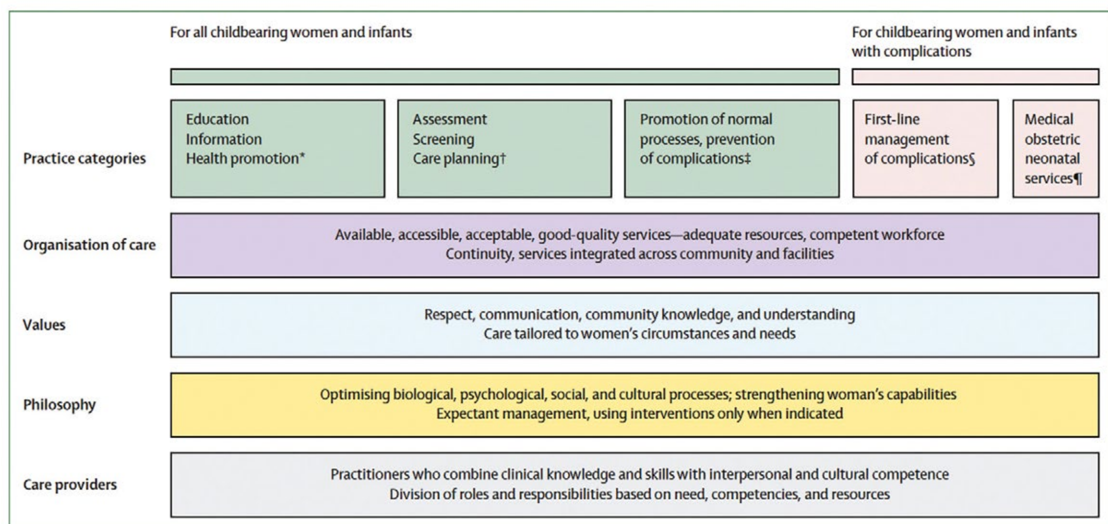
3.2 Midwifery models of care humanize care and are responsive to the needs of women

Midwifery models of care embody the commitment to women's health and rights, acknowledging and addressing the specific health and well-being needs of women and newborns. While women's main goals are to survive childbirth and have a healthy baby, they also value a positive pregnancy and childbirth experience that meets or surpasses their personal and sociocultural expectations *(110)*. The Lancet Series on Midwifery analysed 461 Cochrane systematic reviews and 13 meta-syntheses to identify what all women and newborns need from the health system across the continuum of care *(79)*. These findings have been summarized in the

"Framework for Quality Maternal and Newborn Care", as shown in Fig. 3.2. Women expect to receive safe, high-quality, attentive and individualized care, along with adequate information and support *(79,111)*. Having access to respectful, dignified and non-discriminatory care for reproductive and maternal health is one of the priorities for over 1 million women interviewed through the "What Women Want" campaign *(112)*. Women desire to receive care from health workers who are respectful, competent, empathic, helpful, not rushed, kind, understanding and compassionate *(79,110–112)*. They aspire to experience the physiological process of labour and birth in a safe environment, supported by birth companions of their choice *(110)*. They wish to feel actively involved in the decision-making process, enabling a sense of personal achievement and control *(110,111).*

Midwifery models of care significantly enhance satisfaction with care and the experience of care for women, aligning with public demand for high-quality care *(99,100)*. Women who receive continuity of midwife care generally report a more positive experience with care and an improved pregnancy and childbirth experience *(99,100)*. This, in turn, increases retention in care, treatment adherence and confidence in health systems, and positively influences women's and families' decisions to seek care from skilled health workers *(113)*. In continuity of midwife care models, women value the woman–midwife relationship, which is perceived as a trusting and friendly personal partnership *(114–119)*. In these models of care, women are involved in decision-making and feel empowered in making informed decisions *(115,118)*. They also feel known, understood and respected, and they have increased confidence in midwives' abilities and competencies to provide care, as well as in their own abilities *(120)*. Midwifery models of care enable women to make informed health decisions, contributing to their overall autonomy in decision-making and their ability to fully enjoy their sexual and reproductive health and rights.

Fig. 3.2 The Framework for Quality Maternal and Newborn Care: maternal and newborn health components of a health system needed by childbearing women and newborn infants



*Examples of education, information, and health promotion include maternal nutrition, family planning, and breastfeeding promotion. †Examples of assessment, screening, and care planning include planning for transfer to other services as needed, screening for sexually transmitted diseases, diabetes, HIV, pre-eclampsia, mental health problems, and assessment of labour progress. ‡Examples of promoting normal processes and preventing complications include prevention of mother-to-child transmission of HIV, encouraging mobility in labour, clinical, emotional, and psychosocial care during uncomplicated labour and birth, immediate care of the newborn baby, skin-to-skin contact, and support for breastfeeding. §Examples of first-line management of complications include treatment of infections in pregnancy, anti-D administration in pregnancy for rhesus-negative women, external cephalic version for breech presentation, and basic and emergency obstetric and newborn baby care (WHO 2009 monitoring emergency care), such as management of pre-eclampsia, post-partum iron deficiency anaemia, and post-partum haemorrhage. ¶Examples of management of serious complications include elective and emergency caesarean section, blood transfusion, care for women with multiple births and medical complications such as HIV and diabetes, and services for preterm, small for gestational age, and sick neonates.

Source: Renfrew et al., 2014 *(79)*. Reproduced with permission.

3.3 Midwifery models of care contribute to a better society and advance human capital in an uncertain world

Midwives have always had a pivotal role within societies and cultures, as acknowledged by the recent inscription of "Midwifery: knowledge, skills and practices" on the United Nations Educational, Scientific and Cultural Organization (UNESCO) Representative List of the Intangible Cultural Heritage of Humanity *(121)*.

Midwives strive to create an environment that promotes, respects, protects, ensures and upholds the rights of women and newborns to the highest attainable standard of health and their rights to education and information *(122,123)*. Implementation of midwifery models of care enhances access to maternal and newborn health services in countries for all women and newborns, therefore addressing critical gaps in the health system and its capacity to meet population needs. Midwives also facilitate universal access to SRHR for women, adolescent girls, men and adolescent boys, families and communities and they can have an impact on the reduction of violence, harmful practices and discrimination. They contribute to positive changes in societal, cultural and gender norms and traditions, which helps to maintain women's economic productivity and participation.

Midwives can provide lifesaving maternal and newborn interventions in times of crisis *(122–129)*. Instances of crisis in the world are becoming more frequent, varied and/or protracted. In 2020, WHO released a list of 13 urgent global health challenges for the decade ahead, including these four: elevating health in the climate debate; delivering health in conflict and crisis (including disease outbreaks); making health care fairer (reducing inequalities); and preparing for epidemics *(130)*. Midwives can ensure continuity of maternal and newborn care in all these situations. They continue to provide midwifery care and take care of women and newborns in difficult circumstances, such as in camps for refugees or internally displaced persons *(131,132)*, situations of armed conflict *(133–138)* and natural disasters *(122,139–141)*; their assistance can help mitigate the impacts of the intense stress experienced by women during crisis situations *(142)*.

In 2022, during the unprecedented and severe climate-related flooding in Pakistan and Bangladesh, midwives continued providing care despite disrupted health services during this disaster, with some midwives being deployed to rural health facilities to ensure continuity of care for those affected *(129,143,144)*. In Queensland, Australia, in 2011, continuity of midwife care mitigated the effects of sudden-onset severe floods on women's levels of anxiety, subjective stress and depression *(142)*.

During the COVID-19 pandemic, pregnant women were at increased risk of maternal deaths, admission to the intensive care unit and preterm birth *(145)*. Midwives were at the core of the response to the pandemic and contributed significantly to ensuring continuity of care for women during this period *(146–152)*, despite extremely difficult working conditions, including situations where there was a lack of personal protective equipment to prevent contamination *(153–155)*. During this unprecedented period, midwives rapidly adjusted the way they provided care through telemedicine implementation, both in HICs and LMICs *(147,149,152,156,157)*.

3.4 Midwifery models of care are a cost-effective intervention with potential long-term economic benefits

Implementing midwifery models of care maximizes the efficiency of resource allocation, ensuring public funds are invested in the most effective and impactful maternal and newborn health-care practices. Midwifery care has been identified as the best strategy to enhance maternal and neonatal health outcomes while optimizing resource allocation, when coupled with obstetrician care in case of maternal complications *(79,81–84,99)*. Continuity of midwife care models yield cost savings in the antenatal and intrapartum periods, when compared with other models of care *(99)*. The current cost-effectiveness of midwifery care stems from several factors, including:

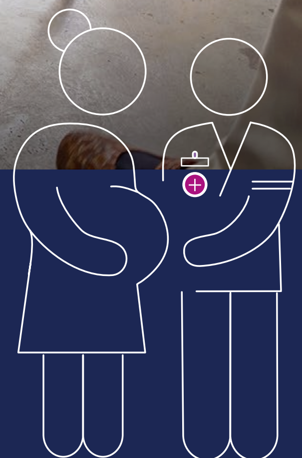
- shorter training duration and consequent reductions in educational expenses compared with obstetricians;
- the diminution in costs associated with mortality and morbidity that midwifery averts, including the prevention of long-term health complications; and
- reduced expenses during pregnancy, childbirth and the postnatal period – attributed to fewer medical interventions, such as caesarean sections *(79,81,82,99,158,159)*.

Economic analyses indicate that the average expenditure per woman is lower with midwifery care compared with physician-delivered care, with savings of 182 euros per woman in Ireland *(160)* and 2262 US dollars per woman in the United States of America (USA) for low-risk pregnancies *(158)*. A cost-minimization analysis reported that, in Switzerland, early postnatal discharge combined with home midwifery support resulted in cost savings of 1221 Swiss francs per mother–infant dyad *(161)*. In Australia, the expenses associated with midwifery group practice costs were 22% lower than those for other models of care *(162)*, yielding annual savings of 1394.88 Australian dollars compared with care provided by private obstetricians and 1935 Australian dollars compared with standard hospital care *(83)*. Increasing the percentage of women benefiting from midwifery care from 8.9% to 20% over eight years could potentially save 4 billion US dollars in the USA *(163)*.

Modelling analysis was performed to simulate the effects of expanding midwifery and obstetrician care on costs and on maternal, fetal and neonatal mortality, in 58 LMICs. The study found that midwifery care, whether provided separately or integrated together with obstetrician care, was nearly twice as cost-effective as care provided by obstetricians alone (2200 US dollars versus 4200 US dollars per death averted) *(81)*. The cost per death averted was lowest (2100 US dollars) in scenarios described as "universal scale-up", involving integrated midwifery and obstetrician care with expanded family planning services, yielding a total savings of 2.7 billion US dollars compared with scale-up of obstetrics alone *(81)*. In Morocco, a comparative analysis identified a cost–benefit ratio of nearly 16 for midwifery investments, focusing solely on the reduction of maternal and newborn fatalities and excluding the broader benefits of midwifery care models *(164)*.

However, limitations should be noted: the results presented above may apply inconsistent economic evaluation methods and depend on the health system structure within a country, the type of data gathered and the factors considered in the analysis.

4



A woman who is a survivor of sexual violence receives holistic support from a midwife during labour at Panzi Hospital in the Democratic Republic of the Congo.
© UNFPA Democratic Republic of the Congo/Lisa Thanner

4. Guiding principles of midwifery models of care

The guiding principles of midwifery models of care, as depicted in Fig. 4.1, are tailored to the needs and requests of women *(79,112,115)*. These principles are grounded in a philosophy of care that optimizes physiological, biological, psychological, social and cultural processes and emphasizes the importance of a person- and human rights-centred approach, based on a trusting partnership and relationship between women and midwives *(79,115,165–167)*. Midwives provide and coordinate, across their scope of practice, equitable, person-centred, holistic, respectful, high-quality and integrated care along the continuum of care starting from pre-pregnancy and continuing all the way through the postnatal period, within interdisciplinary teams and networks of care.

The guiding principles align with the core principles of integrated person-centred health services *(168)*, primary health care *(77)*, ENAP and EPMM *(74,75)*. They are also in accordance with the International Bill of Rights[15] *(169)* and with the following key documents, which are all instrumental to achieving UHC and gender equality: the Convention on the Elimination of All Forms of Discrimination against Women *(170)*; the Convention on the Rights of the Child *(171)*; the Convention on the Rights of Persons with Disabilities *(172)*; the Programme of Action of the 1994 International Conference on Population and Development *(173)*; and the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment *(174)*.

Fig. 4.1 Guiding principles of midwifery models of care

Every midwifery model of care should strive to be informed by these guiding principles.

15 The International Bill of Human Rights includes the Universal Declaration of Human Rights, the International Covenant on Economic Social and Cultural Rights and the International Covenant on Civil and Political Rights.

1

GUIDING PRINCIPLE 1

4.1 Equitable and human-rights-based care enabling access for all women and newborns

In midwifery models of care, the care provided to women and newborns is equitable and available for all women and newborns. In all circumstances and irrespective of their risk status, women and newborns have an equitable opportunity to receive culturally sensitive and non-discriminatory midwifery care tailored to their needs, without incurring financial hardship *(79,112,175)*. Midwifery models of care bring health services closer to where women, newborns and families live (e.g. home-based or community-based care), which facilitates timely access to care for all. Midwifery care mitigates inequities, inequalities and social disadvantages *(94,176–179)*.

Midwives play a significant role in advancing human rights, particularly the rights of women and newborns *(180)*. Midwives work to protect the right to the highest attainable standard of health and the rights to education and information *(170)*. Midwives also enhance access to health services, play a central role in defending women's sexual and reproductive rights, and are important partners in promoting gender equality. They provide respectful and non-discriminatory care, support women in making informed decisions regarding their own health and well-being, and are committed to creating environments conducive to the realization of rights for women and newborns *(180)*.

A midwife checks a newborn's temperature at Banadir Hospital in Mogadishu, Somalia. © UNFPA/Luis Tato

GUIDING PRINCIPLE 2

4.2 Person-centred and respectful care encouraging a trusting relationship and partnership between women and midwives

Women and newborns are at the centre of midwifery care *(92,115)*. In midwifery models of care, women develop a strong, trusting and positive personal relationship and partnership with their midwife or midwives *(114–119)*. Women and newborns receive care tailored to their preferences, needs and values. Women value the experience of continuity of care, received from a trusted and familiar midwife who is knowledgeable about their medical, psychological and social history *(94,95,115,181)*, as it fosters a secure and reliable connection between midwives and women *(94,115,120,175,182)*.

In midwifery models of care, women are enabled to collaboratively plan their care through informed decision-making and are fully engaged in designing, implementing and monitoring the health services they receive, thereby taking control of their own health and well-being *(77,85,116,175)*. They are respected, listened to and understood *(183)*. They receive culturally sensitive health education on self-care, and their internal resilience and autonomy are supported, thereby enhancing women's own abilities to care for themselves and their relatives *(79,183)*. In midwifery models of care, women feel heard and are actively included in decision-making, which improves their ability to seek timely help *(94,115,120,175,182)*. This, in turn, can alleviate feelings of anxiety and stress, improve coordination of care and enhance safety *(94,95,103,115,181,182)*.

In midwifery models of care, women and newborns receive respectful care from midwives, which maintains women's dignity, privacy and confidentiality; ensures freedom from harm, violence, discrimination and mistreatment; and enables informed choice and continuous support through the continuum of care from pre-pregnancy through to the end of the postnatal period.

Partners, men, adolescent boys, families and communities also benefit from midwifery care, mainly through health promotion, education and preventive care initiatives in SRMNCAH *(184)*. Men's and adolescent boys' engagement has been associated with improved health-care attendance; better care practices at home, such as breastfeeding; increased couples communication; and equitable decision-making for maternal and newborn health *(184–186)*; more research is needed in these areas. Midwives engage with partners during pregnancy, labour, childbirth and the postnatal period, while upholding women's autonomy in decision-making and their ability to fully enjoy their SRHR free from coercion *(184)*. During the continuum of care from pre-pregnancy through to the end of the postnatal period, midwives support future parents in their transition to parenthood and help them to build their parenting skills. In case of perinatal loss, such as a miscarriage, stillbirth or neonatal death, midwives contribute in collaboration with other health workers to providing bereavement care to the woman and her partner based on their individual needs *(187)*.

GUIDING PRINCIPLE 3

4.3 High-quality care aligned with the midwifery philosophy of care

In midwifery models of care, women and newborns receive care that is founded on the philosophy and values of midwifery, which promote a person-centred approach to care; value the woman–midwife relationship and partnership; optimize physiological, biological, psychological, social and cultural processes; and use interventions only when indicated. The midwifery philosophy of care considers pregnancy, labour, childbirth and the postnatal period as natural physiological processes, free from severe complications for the majority of women and newborns; it also focuses on health-promoting aspects of care rather than solely focusing on avoiding harm and adverse events *(59)*. When they identify complications, midwives proceed by facilitating access to specialist services according to the needs of each woman and newborn. This ensures a person-centred approach to care, tailored to the unique circumstances of every woman, newborn and family.

In midwifery models of care, women and newborns receive ethical and high-quality care. Midwives adhere to a code of ethics that supports them in upholding a standard of ethical conduct in their practice. Women and newborns are provided with midwifery care that is not only equitable (Guiding Principle 1) and person-centred (Guiding Principle 2), but also safe, effective, timely, efficient and integrated (Guiding Principle 5). Midwives use the best, most up-to-date available evidence generated by rigorous research, to provide high-quality evidence-based care to women and their newborns. The application of evidence-based practice improves women's and newborns' quality of care, outcomes and safety, and reduces costs *(188)*. It also increases job satisfaction among midwives and fosters professional growth *(188)*. To generate evidence-based midwifery practices, midwives are given the opportunity to advance scientific knowledge within their area of expertise and lead research in midwifery. Midwives also make use of mobile/electronic health (mHealth/eHealth), including artificial intelligence, as appropriate, which improves their productivity and therefore their availability *(189)*.

4

GUIDING PRINCIPLE 4

4.4 Care provided and coordinated by autonomous, educated, regulated and supported midwives, in all settings and at all levels of the health system

In midwifery models of care, women and newborns receive care from midwives who act as their main health-care providers and point of entry to maternal and newborn care. Midwives provide and coordinate the care that lies within their scope of practice, through shared decision-making with women and families, throughout the continuum of care from pre-pregnancy through to the end of the postnatal period, at all levels of the health system. With their unique set of knowledge and competencies, educated, regulated and licensed midwives are well equipped to provide high-quality and ethical midwifery care across the full scope of midwifery practice to women and newborns throughout the continuum of care. After obtaining informed consent from women and/or parents of the newborn, midwives make autonomous decisions within their scope of practice which renders them accountable for their decisions and actions as independent practitioners. When provided with continuity, midwifery care allows midwives to work along the whole continuum of care and across their full scope of practice, and in this process they can improve their competencies in identifying women's needs and develop their approach to providing care for different individuals *(120)*.

Midwifery models of care are adaptable to all levels of care and contexts, including home-, community- and hospital-based settings; the public and private sectors and public–private partnerships; resource-constrained environments; and humanitarian and crisis settings. Midwives can work across primary, secondary and tertiary levels of care where they can manage and/or contribute to providing midwifery care within an interdisciplinary team. The scope of practice of midwives facilitates their ability to continue providing care to women and newborns as they navigate through the health system, based on their care needs – for example, from primary care to secondary care and back again. This ensures wide accessibility, equity and relevance of care across different cultural contexts for women, newborns, partners, families and communities *(94,95)*.

To provide high-quality care, midwives must be supported, respected and integrated within a functional health system. They must operate in a safe and supportive environment, free from gender-based discrimination, violence and harassment. They should be guaranteed decent working conditions with access to sufficient basic resources, including water, sanitation, electricity and supplies, such as life-saving commodities *(190)*.

GUIDING PRINCIPLE 5

4.5 Integrated care provided within interdisciplinary teams in networks of care

Close collaboration with other health and social workers, supported by strong consultation and referral mechanisms, is required and critical to provide high-quality services under UHC *(77,168,191,192)*. Models of care centred around interdisciplinary teams, which encompass a range of skills and optimal scopes of practice, improves workforce productivity while efficiently responding to the varied needs of populations and communities *(189)*.

Being the main provider of maternal and newborn care and working with professional autonomy does not imply that midwives work alone. In midwifery models of care, midwives are members of interdisciplinary teams, through networks of care, within health systems that provide effective mechanisms for consultation and referral. This collaborative and integrated approach to care represents an effective strategy to reduce the mortality and morbidity of women and newborns while also being cost-effective *(79–81)*. It ensures interpersonal, longitudinal, management and informational continuity (Annex 2). This collaboration requires role clarification and agreements among professionals within and between sectors; clear referral strategies and pathways; individualized and tailored care planning; case management for women and newborns with complex needs; shared and synchronized care records; and standardized clinical protocols in all care settings *(175)*.

Midwives collaborate and coordinate with a wide range of other health workers: obstetricians, paediatricians, neonatologists, anaesthesiologists, psychiatrists, generalist medical practitioners, nurses, health-care assistants such as birth assistants, associate professionals, psychologists, nutritionists, dieticians, pharmacists, physiotherapists, social workers and other health and care workers. This teamwork is based on ongoing relationships of mutual trust, respect, positive regular communication, collaborative practice, informed decision-making, effective leadership and supportive supervision and mentorship, within and between health facilities and levels of care *(193–195)*. Networks of care also ensure longitudinal and informational continuity (Annex 2) with other health workers who provide care to women and newborns for health issues unrelated to pregnancy and/or who provide them with care before pregnancy and after the postnatal period.

In midwifery models of care, midwives and other health workers are connected through functional networks of care, which foster information sharing and collaborative learning *(193,194)*. Networks involving close collaboration, coordination and trusting partnership enable other health workers – including obstetricians, paediatricians, nurses, generalist medical practitioners and community health workers – to understand the full potential and scope of midwifery practice and to support the implementation of midwifery models of care. They also facilitate the midwife to continue providing midwifery care in case of complications requiring more complex care. When women or newborns need specialized care, specialist medical practitioners coordinate the care and collaborate with midwives. This reduces the risk of fragmented care and ensures that women and newborns continue to receive personalized midwifery care. This can be adapted to the level of complexity of their situation, across all settings and at all levels of the health system *(175)*.

A pregnant woman undergoes an ultrasound scan performed by a midwife using portable ultrasound technology at Ntimaru Sub County Level 4 Hospital in Kehancha, Migori County, Kenya. © UNFPA Kenya

5

A pregnant woman, on her hands and knees, is being supported by midwives during labour in Japan. © ICM/Noriko Hayashi

5. Conclusion

This document provides an international definition of midwifery models of care, justifies their programmatic significance and delineates the core guiding principles, integrated within the main components of primary health care.

In midwifery models of care, midwives serve as the main health-care provider for women and newborns throughout the continuum of care starting from pre-pregnancy and including pregnancy, labour, childbirth and the postnatal period. They provide and coordinate, across their scope of practice, equitable, person-centred, high-quality maternal and newborn health care, using an approach that is aligned with the midwifery philosophy of care. While midwives work autonomously within their scope of practice, they collaborate as members of interdisciplinary teams, within networks of care, to ensure continuous, integrated and collaborative care that is respectful and cost-effective.

High-quality midwifery care saves lives and could enhance more than 50 health and well-being outcomes, while continuity of midwife care improves satisfaction with care and the experience of care for women, partners, families and communities. Transitioning to midwifery models of care represents a cost-effective and urgently needed solution to save and improve the lives and well-being of women and newborns globally, while respecting human rights. The available evidence around midwifery models of care is mainly from HICs, highlighting that implementation research on this topic is needed in LMICs in order to continue to grow the evidence base. To facilitate the adoption of midwifery models of care in countries, a detailed guidance document for implementation of midwifery models of care, including case studies, is currently in development to accompany this global position paper. These documents will support countries as they progressively transition to midwifery models of care adapted to their unique contexts, thereby contributing to the attainment of UHC and the SDGs, and ultimately improving the lives and well-being of their populations.

References[16]

1. United Nations Maternal Mortality Estimation Inter-agency Group. 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://iris.who.int/handle/10665/366225). Licence: CC BY-NC-SA 3.0 IGO.
2. Graham W, Woodd S, Byass P, Filippi V, Gon G, Virgo S et al. Diversity and divergence: the dynamic burden of poor maternal health. Lancet. 2016;388(10056):2164–75 (https://doi.org/10.1016/s0140-6736(16)31533-1).
3. Guide for integration of perinatal mental health in maternal and child health services. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/362880). Licence: CC BY-NC-SA 3.0 IGO.
4. Knight M. The findings of the MBRRACE-UK confidential enquiry into Maternal Deaths and Morbidity. Obstet Gynaecol Reprod Med. 2019;29(1):21–3 (https://doi.org/10.1016/j.ogrm.2018.12.003).
5. Chin K, Wendt A, Bennett IM, Bhat A. Suicide and maternal mortality. Curr Psychiatry Rep. 2022;24(4):239–75 (https://doi.org/10.1007/s11920-022-01334-3).
6. Diguisto C, Saucedo M, Kallianidis A, Bloemenkamp K, Bødker B, Buoncristiano M et al. Maternal mortality in eight European countries with enhanced surveillance systems: descriptive population based study. BMJ. 2022;379:e070621 (https://doi.org/10.1136/bmj-2022-070621).
7. Santé publique France. Les morts maternelles en France: mieux comprendre pour mieux prévenir. 7e rapport de l'Enquête nationale confidentielle sur les morts maternelles (ENCMM), 2016–2018. Saint-Maurice: Santé Publique France; 2024, p. 232. Report No.: 7. (https://www.santepubliquefrance.fr/maladies-et-traumatismes/maladies-cardiovasculaires-et-accident-vasculaire-cerebral/maladies-vasculaires-de-la-grossesse/documents/enquetes-etudes/les-morts-maternelles-en-france-mieux-comprendre-pour-mieux-prevenir.-7e-rapport-de-l-enquete-nationale-confidentielle-sur-les-morts-maternelles).
8. Miller S, Belizán JM. The true cost of maternal death: individual tragedy impacts family, community and nations. Reprod Health. 2015;12:56 (https://doi.org/10.1186/s12978-015-0046-3).
9. National Research Council (US) Committee on Population, Reed HE, Koblinsky MA, Mosley WH. Evidence on the consequences of maternal mortality. In: The consequences of maternal morbidity and maternal mortality: report of a workshop. National Academies Press (US); 2000 (https://www.ncbi.nlm.nih.gov/books/NBK225436/).
10. Vogel J, Souza J, Mori R, Morisaki N, Lumbiganon P, Laopaiboon M et al. Maternal complications and perinatal mortality: findings of the World Health Organization Multicountry Survey on Maternal and Newborn Health. BJOG Int J Obstet Gynaecol. 2014;121(Suppl 1):76–88 (https://doi.org/10.1111/1471-0528.12633).
11. Geller SE, Koch AR, Garland CE, MacDonald EJ, Storey F, Lawton B. A global view of severe maternal morbidity: moving beyond maternal mortality. Reprod Health. 2018;15(Suppl 1):98 (https://doi.org/10.1186/s12978-018-0527-2).
12. Gon G, Leite A, Calvert C, Woodd S, Graham WJ, Filippi V. The frequency of maternal morbidity: A systematic review of systematic reviews. Int J Gynaecol Obstet. 2018;141(Suppl 1):20–38 (https://doi.org/10.1002/ijgo.12468).
13. Vogel JP, Jung J, Lavin T, Simpson G, Kluwgant D, Abalos E et al. Neglected medium-term and long-term consequences of labour and childbirth: a systematic analysis of the burden, recommended practices, and a way forward. Lancet Glob Health. 2024;12(2):e317–30 (https://doi.org/10.1016/S2214-109X(23)00454-0).
14. Akhter S. Maternal morbidity: the lifelong experience of survivors. Lancet Glob Health. 2024;12(2):e188–9 (https://doi.org/10.1016/s2214-109x(23)00553-3).
15. World family planning 2022: meeting the changing needs for family planning: contraceptive use by age and method. New York: United Nations Department of Economic and Social Affairs, Population Division; 2022 (UN DESA/POP/2022/TR/No. 4; https://desapublications.un.org/publications/world-family-planning-2022-meeting-changing-needs-family-planning-contraceptive-use).
16. Abortion care guideline. Geneva: World Health Organization; 2022 (https://iris.who.int/handle/10665/349316). Licence: CC BY-NC-SA 3.0 IGO.
17. Bearak J, Popinchalk A, Ganatra B, Moller AB, Tunçalp Ö, Beavin C et al. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990–2019. Lancet Glob Health. 2020;8(9):e1152–61 (https://doi.org/10.1016/s2214-109x(20)30315-6).
18. Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels J et al. Global causes of maternal death: a WHO systematic analysis. Lancet Glob Health. 2014;2(6):e323–33 (https://doi.org/10.1016/s2214-109x(14)70227-x).
19. United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). Levels and trends in child mortality: report 2023, estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation. New York: United Nations Children's Fund; 2024 (https://data.unicef.org/resources/levels-and-trends-in-child-mortality-2024/).
20. Global Health Estimates: Life expectancy and leading causes of death and disability. In: The Global Health Observatory [website]. Geneva: World Health Organization; 2024 (https://www.who.int/data/gho/data/themes/mortality-and-global-health-estimates).

16 For all references that are available online, the links were accessed on 3 July 2024, unless otherwise indicated.

21. Ohuma EO, Moller AB, Bradley E, Chakwera S, Hussain-Alkhateeb L, Lewin A et al. National, regional, and global estimates of preterm birth in 2020, with trends from 2010: a systematic analysis. Lancet. 2023;402(10409):1261–71 (https://doi.org/10.1016/s0140-6736(23)00878-4).

22. Okwaraji YB, Krasevec J, Bradley E, Conkle J, Stevens GA, Gatica-Domínguez G et al. National, regional, and global estimates of low birthweight in 2020, with trends from 2000: a systematic analysis. Lancet. 2024;403(10431):1071–80 (https://doi.org/10.1016/s0140-6736(23)01198-4).

23. Perin J, Mulick A, Yeung D, Villavicencio F, Lopez G, Strong KL et al. Global, regional, and national causes of under-5 mortality in 2000–19: an updated systematic analysis with implications for the Sustainable Development Goals. Lancet Child Adolesc Health. 2022;6(2):106–15 (https://doi.org/10.1016/s2352-4642(21)00311-4).

24. Survive and thrive: transforming care for every small and sick newborn. World Health Organization; 2019 (https://iris.who.int/handle/10665/326495). Licence: CC BY-NC-SA 3.0 IGO.

25. World Health Organization, Partnership for Maternal Newborn and Child Health, United Nations Children's Fund, United Nations Population Fund. Born too soon: decade of action on preterm birth. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/367620). Licence: CC BY-NC-SA 3.0 IGO.

26. Barker DJP. The origins of the developmental origins theory. J Intern Med. 2007;261(5):412–7 (https://doi.org/10.1111/j.1365-2796.2007.01809.x).

27. Watkins DA, Msemburi WT, Pickersgill SJ, Kawakatsu Y, Gheorghe A, Dain K et al. NCD Countdown 2030: efficient pathways and strategic investments to accelerate progress towards the Sustainable Development Goal target 3.4 in low-income and middle-income countries. Lancet. 2022;399(10331):1266–78 (https://doi.org/10.1016/s0140-6736(21)02347-3).

28. Hanson MA, Gluckman PD. Early developmental conditioning of later health and disease: physiology or pathophysiology? Physiol Rev. 2014;94(4):1027–76 (https://doi.org/10.1152/physrev.00029.2013).

29. NEOVITA Study Group. Timing of initiation, patterns of breastfeeding, and infant survival: prospective analysis of pooled data from three randomised trials. Lancet Glob Health. 2016;4(4):e266–75 (https://doi.org/10.1016/s2214-109x(16)00040-1).

30. Breastfeeding. In: UNICEF DATA [website]. New York: United Nations Children's Fund; 2023 (https://data.unicef.org/topic/nutrition/breastfeeding/, accessed 19 October 2023).

31. United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). Never forgotten: the situation of stillbirth around the globe. New York: United Nations Children's Fund; 2023 (https://data.unicef.org/resources/never-forgotten-stillbirth-estimates-report/).

32. State of inequality: reproductive, maternal, newborn and child health. Geneva: World Health Organization; 2015 (https://iris.who.int/handle/10665/164590).

33. Sully EA, Biddlecom A, Darroch JE, Riley T, Ashford LS, Lince-Deroche N et al. Adding it up: investing in sexual and reproductive health 2019. New York: Guttmacher Institute; 2020 (https://www.guttmacher.org/report/adding-it-up-investing-in-sexual-reproductive-health-2019).

34. Global accelerated action for the health of adolescents (AA-HA!): guidance to support country implementation. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/373300). Licence: CC BY-NC-SA 3.0 IGO.

35. Global humanitarian overview 2024. Geneva and New York: United Nations Office for the Coordination of Humanitarian Affairs; 2023 (https://doi.org/10.18356/9789213587089).

36. Global Report 2022. Geneva: United Nations High Commissioner for Refugees; 2022 (https://reporting.unhcr.org/global-report-2022).

37. Bendavid E, Boerma T, Akseer N, Langer A, Malembaka EB, Okiro EA et al. The effects of armed conflict on the health of women and children. Lancet. 2021;397(10273):522–32 (https://doi.org/10.1016/s0140-6736(21)00131-8).

38. Homer CS, Turkmani S, Wilson AN, Vogel JP, Shah MG, Fogstad H et al. Enhancing quality midwifery care in humanitarian and fragile settings: a systematic review of interventions, support systems and enabling environments. BMJ Glob Health. 2022;7(1):e006872 (https://doi.org/10.1136/bmjgh-2021-006872).

39. Jawad M, Hone T, Vamos EP, Cetorelli V, Millett C. Implications of armed conflict for maternal and child health: a regression analysis of data from 181 countries for 2000–2019. PLoS Med. 2021;18(9):e1003810 (https://doi.org/10.1371/journal.pmed.1003810).

40. Global humanitarian overview 2023. Geneva and New York: United Nations Office for the Coordination of Humanitarian Affairs; 2022 (https://doi.org/10.18356/9789210024136).

41. Miller S, Abalos E, Chamillard M, Ciapponi A, Colaci D, Comandé D et al. Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. Lancet. 2016;388(10056):2176–92 (https://doi.org/10.1016/s0140-6736(16)31472-6).

42. Maternal and newborn health coverage. In: UNICEF Data [website]. New York: United Nations Children's Fund; 2022 (https://data.unicef.org/resources/dataset/maternal-newborn-health/, accessed 20 April 2024).

43. Ahmed S, Anastasi E, Laski L. Double burden of tragedy: stillbirth and obstetric fistula. Lancet Glob Health. 2016;4(2):e80–2 (https://doi.org/10.1016/S2214-109X(15)00290-9).

44. Kruk ME, Gage AD, Joseph NT, Danaei G, García-Saisó S, Salomon JA. Mortality due to low-quality health systems in the universal health coverage era: a systematic analysis of amenable deaths in 137 countries. Lancet. 2018;392(10160):2203–12 (https://doi.org/10.1016/s0140-6736(18)31668-4).

45. Bohren MA, Vogel JP, Hunter EC, Lutsiv O, Makh SK, Souza JP et al. The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. PLoS Med. 2015;12(6):e1001847 (https://doi.org/10.1371/journal.pmed.1001847).

46. Bohren MA, Iyer A, Barros AJD, Williams CR, Hazfiarini A, Arroyave L et al. Towards a better tomorrow: addressing intersectional gender power relations to eradicate inequities in maternal health. eClinicalMedicine. 2024;67:102180 (https://doi.org/10.1016/j.eclinm.2023.102180).
47. Standards for improving quality of maternal and newborn care in health facilities. Geneva: World Health Organization; 2016 (https://iris.who.int/handle/10665/249155).
48. Bohren MA, Hunter EC, Munthe-Kaas HM, Souza JP, Vogel JP, Gülmezoglu AM. Facilitators and barriers to facility-based delivery in low- and middle-income countries: a qualitative evidence synthesis. Reprod Health. 2014;11(1):71 (https://doi.org/10.1186/1742-4755-11-71).
49. O'Neil S, Naeve K, Ved R. An examination of the maternal health quality of care landscape in India. Cambridge, USA: Mathematica Policy Research; 2017 (https://www.mathematica.org/publications/an-examination-of-the-maternal-health-quality-of-care-landscape-in-india).
50. Khalil M, Carasso KB, Kabakian-Khasholian T. Exposing obstetric violence in the Eastern Mediterranean region: a review of women's narratives of disrespect and abuse in childbirth. Front Glob Womens Health. 2022;3:850796 (https://doi.org/10.3389/fgwh.2022.850796).
51. Limmer CM, Stoll K, Vedam S, Leinweber J, Gross MM. Measuring disrespect and abuse during childbirth in a high-resource country: development and validation of a German self-report tool. Midwifery. 2023;126:103809 (https://doi.org/10.1016/j.midw.2023.103809).
52. Schroll AM, Kjærgaard H, Midtgaard J. Encountering abuse in health care; lifetime experiences in postnatal women: a qualitative study. BMC Pregnancy Childbirth. 2013;13:74 (https://doi.org/10.1186/1471-2393-13-74).
53. Haut Conseil à l'Egalité entre les femmes et les hommes (HCE). Les actes sexistes durant le suivi gynécologique et obstétrical. Report No. 2018-06-26-SAN-034. Paris: HCE; 2018, p. 164 (https://www.haut-conseil-egalite.gouv.fr/IMG/pdf/hce_les_actes_sexistes_durant_le_suivi_gynecologique_et_obstetrical_20180629.pdf).
54. Freedman LP, Kruk ME. Disrespect and abuse of women in childbirth: challenging the global quality and accountability agendas. Lancet. 2014;384(9948):e42–4 (https://doi.org/10.1016/s0140-6736(14)60859-x).
55. Sacks E. Defining disrespect and abuse of newborns: a review of the evidence and an expanded typology of respectful maternity care. Reprod Health. 2017;14(1):66 (https://doi.org/10.1186/s12978-017-0326-1).
56. Afulani PA, Phillips B, Aborigo RA, Moyer CA. Person-centred maternity care in low-income and middle-income countries: analysis of data from Kenya, Ghana, and India. Lancet Glob Health. 2019;7(1):e96–109 (https://doi.org/10.1016/s2214-109x(18)30403-0).
57. Downe S. Focusing on what works for person-centred maternity care. Lancet Glob Health. 2019;7(1):e10–1 (https://doi.org/10.1016/s2214-109x(18)30544-8).
58. Minckas N, Gram L, Smith C, Mannell J. Disrespect and abuse as a predictor of postnatal care utilisation and maternal-newborn well-being: a mixed-methods systematic review. BMJ Glob Health. 2021;6(4):e004698 (https://doi.org/10.1136/bmjgh-2020-004698).
59. WHO recommendations: intrapartum care for a positive childbirth experience. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/handle/10665/260178). Licence: CC BY-NC-SA 3.0 IGO.
60. Fawke J, Wyllie J, Udaeta E, Rüdiger M, Ersdal H, Wright MD et al. Suctioning of clear amniotic fluid at birth: a systematic review. Resusc Plus. 2022;12:100298 (https://doi.org/10.1016/j.resplu.2022.100298).
61. Souza J, Gülmezoglu A, Lumbiganon P, Laopaiboon M, Carroli G, Fawole B et al. Caesarean section without medical indications is associated with an increased risk of adverse short-term maternal outcomes: the 2004–2008 WHO Global Survey on Maternal and Perinatal Health. BMC Med. 2010;8:71 (https://doi.org/10.1186/1741-7015-8-71).
62. Jiang H, Qian X, Carroli G, Garner P. Selective versus routine use of episiotomy for vaginal birth. Cochrane Database Syst Rev. 2017;(2):CD000081 (https://doi.org/10.1002/14651858.CD000081.pub3).
63. Belghiti J, Kayem G, Dupont C, Rudigoz RC, Bouvier-Colle MH, Deneux-Tharaux C. Oxytocin during labour and risk of severe postpartum haemorrhage: a population-based, cohort-nested case–control study. BMJ Open. 2011;1(2):e000514 (https://doi.org/10.1136/bmjopen-2011-000514).
64. WHO recommendations on antenatal care for a positive pregnancy experience. Geneva: World Health Organization; 2016 (https://apps.who.int/iris/handle/10665/250796).
65. WHO recommendations on maternal and newborn care for a positive postnatal experience. Geneva: World Health Organization; 2022 (https://apps.who.int/iris/handle/10665/352658).
66. Sandall J, Tribe RM, Avery L, Mola G, Visser GH, Homer CS et al. Short-term and long-term effects of caesarean section on the health of women and children. Lancet. 2018;392(10155):1349–57 (https://doi.org/10.1016/s0140-6736(18)31930-5).
67. Gibbons L, Belizán JM, Lauer JA, Betran AP, Merialdi M, Althabe F. The global numbers and costs of additionally needed and unnecessary caesarean sections performed per year: overuse as a barrier to universal coverage. Health Systems Financing. World Health Report 2010, Background Paper No. 30. Geneva: World Health Organization; 2010, p. 32 (https://www.researchgate.net/publication/265064468).
68. Kumbeni MT, Afaya A, Apanga PA. An assessment of out of pocket payments in public sector health facilities under the free maternal healthcare policy in Ghana. Health Econ Rev. 2023;13(1):8 (https://doi.org/10.1186/s13561-023-00423-0).
69. Haider MR, Rahman MM, Moinuddin M, Rahman AE, Ahmed S, Khan MM. Ever-increasing caesarean section and its economic burden in Bangladesh. PLoS One. 2018;13(12):e0208623 (https://doi.org/10.1371/journal.pone.0208623).

70. Mori AT, Binyaruka P, Hangoma P, Robberstad B, Sandoy I. Patient and health system costs of managing pregnancy and birth-related complications in sub-Saharan Africa: a systematic review. Health Econ Rev. 2020;10(1):26 (https://doi.org/10.1186/s13561-020-00283-y).

71. Binyaruka P, Mori AT. Economic consequences of caesarean section delivery: evidence from a household survey in Tanzania. BMC Health Serv Res. 2021;21(1):1367 (https://doi.org/10.1186/s12913-021-07386-0).

72. Shaw D, Guise JM, Shah N, Gemzell-Danielsson K, Joseph K, Levy B et al. Drivers of maternity care in high-income countries: can health systems support woman-centred care? Lancet. 2016;388(10057):2282–95 (https://doi.org/10.1016/s0140-6736(16)31527-6).

73. Human rights-based approach to reduce preventable maternal morbidity and mortality: technical guidance. Geneva; Office of the United Nations High Commissioner for Human Rights; 2012 (https://www.ohchr.org/sites/default/files/Documents/Issues/Women/WRGS/Health/TGReduceMaternalMortality.pdf).

74. Every newborn: an action plan to end preventable deaths. Geneva: World Health Organization; 2014 (https://iris.who.int/handle/10665/127938).

75. Ending preventable maternal mortality (EPMM): a renewed focus for improving maternal and newborn health and well-being. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/350834). Licence: CC BY-NC-SA 3.0 IGO.

76. Declaration of Astana: Global Conference on Primary Health Care: Astana, Kazakhstan, 25 and 26 October 2018. World Health Organization; 2019 (https://iris.who.int/handle/10665/328123). Licence: CC BY-NC-SA 3.0 IGO.

77. World Health Organization, United Nations Children's Fund. Operational framework for primary health care: transforming vision into action. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/337641). Licence: CC BY-NC-SA 3.0 IGO.

78. WHO Strategic and Technical Advisory Group of Experts for maternal, newborn, child, and adolescent health and nutrition (STAGE). Transforming women's, children's, and adolescents' health and wellbeing through primary health care. Lancet. 2023;402(10413):1606-8 (https://doi.org/10.1016/s0140-6736(23)01909-8).

79. Renfrew MJ, McFadden A, Bastos MH, Campbell J, Channon AA, Cheung NF et al. Midwifery and quality care: findings from a new evidence-informed framework for maternal and newborn care. Lancet. 2014;384(9948):1129–45 (https://doi.org/10.1016/s0140-6736(14)60789-3).

80. Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database Syst Rev. 2016;(4):CD004667 (https://doi.org/10.1002/14651858.cd004667.pub5).

81. Bartlett L, Weissman E, Gubin R, Patton-Molitors R, Friberg IK. The impact and cost of scaling up midwifery and obstetrics in 58 low- and middle-income countries. PLoS One. 2014;9(6):e98550 (https://doi.org/10.1371/journal.pone.0098550).

82. Bernitz S, Aas E, Øian P. Economic evaluation of birth care in low-risk women. A comparison between a midwife-led birth unit and a standard obstetric unit within the same hospital in Norway: a randomised controlled trial. Midwifery. 2012;28(5):591–9 (https://doi.org/10.1016/j.midw.2012.06.001).

83. Tracy SK, Welsh A, Hall B, Hartz D, Lainchbury A, Bisits A et al. Caseload midwifery compared to standard or private obstetric care for first time mothers in a public teaching hospital in Australia: a cross sectional study of cost and birth outcomes. BMC Pregnancy Childbirth. 2014;14:46 (https://doi.org/10.1186/1471-2393-14-46).

84. Homer CS, Matha DV, Jordan LG, Wills J, Davis GK. Community-based continuity of midwifery care versus standard hospital care: a cost analysis. Aust Health Rev. 2001;24(1):85–93 (https://doi.org/10.1071/ah010085).

85. United Nations Population Fund, World Health Organization, International Confederation of Midwives. The state of the world's midwifery 2014: a universal pathway: a woman's right to health. New York: United Nations Population Fund; 2014 (https://www.unfpa.org/sowmy-2014).

86. International Standard Classification of Occupations: ISCO-08. Geneva: International Labour Organization; 2008 (https://isco.ilo.org/en/isco-08/).

87. National Health Workforce Accounts Web Portal [website]. Geneva: World Health Organization; 2024 (https://apps.who.int/nhwaportal/).

88. Health workforce-related terminology: terminology work carried out by the WHO Language department at the request of the Health Workforce department. World Health Organization; 2021 (https://cdn.who.int/media/docs/default-source/health-workforce/hwp/202100608-health-workforce-terminology.pdf).

89. United Nations Population Fund, World Health Organization, International Confederation of Midwives. The state of the world's midwifery 2021: building a health workforce to meet the needs of women, newborns and adolescents everywhere. New York: United Nations Population Fund; 2021 (https://www.unfpa.org/publications/sowmy-2021).

90. Core document: Definition of the midwife and scope of practice of the midwife. International Confederation of Midwives; 2023 (https://internationalmidwives.org/resources/international-definition-of-the-midwife/).

91. Essential competencies for midwifery practice, 2019 update. International Confederation of Midwives; 2019 (https://www.internationalmidwives.org/our-work/policy-and-practice/essential-competencies-for-midwifery-practice.html).

92. Bradford BF, Wilson AN, Portela A, McConville F, Fernandez Turienzo C, Homer CSE. Midwifery continuity of care: a scoping review of where, how, by whom and for whom? PLoS Glob Public Health. 2022;2(10):e0000935 (https://doi.org/10.1371/journal.pgph.0000935).

93. Sandall J, Coxon K, Mackintosh N, Rayment-Jones H, Locock L, Page L et al. Relationships: the pathway to safe, high-quality maternity care. Report from the Sheila Kitzinger symposium at Green Templeton College. Oxford: Green Templeton College; 2015 (https://pre.rcm.org.uk/media/2962/skp_report.pdf).

94. Rayment-Jones H, Harris J, Harden A, Turienzo CF, Sandall J. Project20: Maternity care mechanisms that improve (or exacerbate) health inequalities: a realist evaluation. Women Birth. 2023;36(3):e314–27 (https://doi.org/10.1016/j.wombi.2022.11.006).

95. Dahlberg U, Aune I. The woman's birth experience: the effect of interpersonal relationships and continuity of care. Midwifery. 2013;29(4):407–15 (https://doi.org/10.1016/j.midw.2012.09.006).

96. Freeman GK, Olesen F, Hjortdahl P. Continuity of care: an essential element of modern general practice? Fam Pract. 2003;20(6):623–7 (https://doi.org/10.1093/fampra/cmg601).

97. Nove A, Friberg IK, de Bernis L, McConville F, Moran AC, Najjemba M et al. Potential impact of midwives in preventing and reducing maternal and neonatal mortality and stillbirths: a Lives Saved Tool modelling study. Lancet Glob Health. 2021;9(1):e24–32 (https://doi.org/10.1016/s2214-109x(20)30397-1).

98. New study reveals investing in midwives could save millions of lives. New York: United Nations Population Fund; 2020 (https://www.unfpa.org/sites/default/files/resource-pdf/Midwives_Save_Lives_Infographic.pdf).

99. Sandall J, Fernandez Turienzo C, Devane D, Soltani H, Gillespie P, Gates S et al. Midwife continuity of care models versus other models of care for childbearing women. Cochrane Database Syst Rev. 2024;(4):CD004667.pub6 (https://doi.org/10.1002/14651858.CD004667.pub6).

100. Sutcliffe K, Caird J, Kavanagh J, Rees R, Oliver K, Dickson K et al. Comparing midwife-led and doctor-led maternity care: a systematic review of reviews. J Adv Nurs. 2012;68(11):2376–86 (https://doi.org/10.1111/j.1365-2648.2012.05998.x).

101. Waldenström U, Turnbull D. A systematic review comparing continuity of midwifery care with standard maternity services. Br J Obstet Gynaecol. 1998;105(11):1160–70 (https://doi.org/10.1111/j.1471-0528.1998.tb09969.x).

102. Chapman A, Nagle C, Bick D, Lindberg R, Kent B, Calache J et al. Maternity service organisational interventions that aim to reduce caesarean section: a systematic review and meta-analyses. BMC Pregnancy Childbirth. 2019;19(1):206 (https://doi.org/10.1186/s12884-019-2351-2).

103. Cibralic S, Pickup W, Diaz AM, Kohlhoff J, Karlov L, Stylianakis A et al. The impact of midwifery continuity of care on maternal mental health: a narrative systematic review. Midwifery. 2023;116:103546 (https://doi.org/10.1016/j.midw.2022.103546).

104. Enhancing nursing and midwifery capacity to contribute to the prevention, treatment and management of noncommunicable diseases in practice: policy and advocacy, research and education. Human Resources for Health Observer Issue 12. Geneva: World Health Organization; 2012 (https://www.who.int/publications/m/item/9789241504157).

105. Barker DJ, Osmond C. Infant mortality, childhood nutrition, and ischaemic heart disease in England and Wales. Lancet. 1986;1(8489):1077–81 (https://doi.org/10.1016/s0140-6736(86)91340-1).

106. Painter RC, Roseboom TJ, Bleker OP. Prenatal exposure to the Dutch famine and disease in later life: an overview. Reprod Toxicol. 2005;20(3):345–52 (https://doi.org/10.1016/j.reprotox.2005.04.005).

107. Global action plan for the prevention and control of noncommunicable diseases 2013–2020. Geneva: World Health Organization; 2013 (https://iris.who.int/handle/10665/94384).

108. Brohan MP, Daly FP, Kelly L, McCarthy FP, Khashan AS, Kublickiene K et al. Hypertensive disorders of pregnancy and long-term risk of maternal stroke: a systematic review and meta-analysis. Am J Obstet Gynecol. 2023;229(3):248–68 (https://doi.org/10.1016/j.ajog.2023.03.034).

109. Gluckman PD, Hanson MA, Cooper C, Thornburg KL. Effect of in utero and early-life conditions on adult health and disease. N Engl J Med. 2008;359(1):61-73 (https://doi.org/10.1056/nejmra0708473).

110. Downe S, Finlayson K, Oladapo OT, Bonet M, Gülmezoglu AM. What matters to women during childbirth: a systematic qualitative review. PLoS One. 2018;13(4):e0194906 (https://doi.org/10.1371/journal.pone.0194906).

111. Small R, Roth C, Raval M, Shafiei T, Korfker D, Heaman M et al. Immigrant and non-immigrant women's experiences of maternity care: a systematic and comparative review of studies in five countries. BMC Pregnancy Childbirth. 2014;14:152 (https://doi.org/10.1186/1471-2393-14-152).

112. What women won: demands for quality healthcare. Washington, DC: White Ribbon Alliance; 2022 (https://whiteribbonalliance.org/resources/what-women-won-report/).

113. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. Lancet Glob Health. 2018;6(11):e1196–252 (https://doi.org/10.1016/s2214-109x(18)30386-3).

114. Turkmani S, Nove A, Bazirete O, Hughes K, Pairman S, Callander E et al. Exploring networks of care in implementing midwife-led birthing centres in low- and middle-income countries: a scoping review. PLoS Glob Public Health. 2023;3(5):e0001936 (https://doi.org/10.1371/journal.pgph.0001936).

115. Perriman N, Davis DL, Ferguson S. What women value in the midwifery continuity of care model: a systematic review with meta-synthesis. Midwifery. 2018;62:220–9 (https://doi.org/10.1016/j.midw.2018.04.011).

116. Bradfield Z, Hauck Y, Duggan R, Kelly M. Midwives' perceptions of being "with woman": a phenomenological study. BMC Pregnancy Childbirth. 2019;19(1):363 (https://doi.org/10.1186/s12884-019-2548-4).

117. Shahinfar S, Abedi P, Najafian M, Abbaspoor Z, Mohammadi E, Alianmoghaddam N. Women's perception of continuity of team midwifery care in Iran: a qualitative content analysis. BMC Pregnancy Childbirth. 2021;21(1):173 (https://doi.org/10.1186/s12884-021-03666-z).

118. Walsh D, Devane D. A metasynthesis of midwife-led care. Qual Health Res. 2012;22(7):897–910 (https://doi.org/10.1177/1049732312440330).

119. Styles C, Kearney L, George K. Implementation and upscaling of midwifery continuity of care: the experience of midwives and obstetricians. Women Birth. 2020;33(4):343–51 (https://doi.org/10.1016/j.wombi.2019.08.008).

120. McInnes RJ, Aitken-Arbuckle A, Lake S, Hollins Martin C, MacArthur J. Implementing continuity of midwife carer – just a friendly face? A realist evaluation. BMC Health Serv Res. 2020;20(1):304 (https://doi.org/10.1186/s12913-020-05159-9).

121. Midwifery: knowledge, skills and practices [website]. United Nations Educational, Scientific and Cultural Organization; 2023 (https://ich.unesco.org/en/RL/midwifery-knowledge-skills-and-practices-01968).

122. Rescued from the earthquake in Morocco, midwife Maria delivers babies and saves lives as catastrophe unfolds around her [news release]. United Nations Population Fund; 25 September 2023 (https://www.unfpa.org/news/rescued-earthquake-morocco-midwife-maria-delivers-babies-and-saves-lives-catastrophe-unfolds).

123. Midwives in humanitarian settings: realities of strengthening an essential health workforce. New Security Beat. 5 July 2023 (https://www.newsecuritybeat.org/2023/07/midwives-humanitarian-settings-realities-strengthening-essential-health-workforce/).

124. Nove A, Bytyqi A, Boyce M, Castro Lopes S. Midwives on the front line: delivering midwifery services in difficult times: a snapshot from selected Arab countries. Cairo: United Nations Population Fund, Arab States Regional Office; 2016 (https://arabstates.unfpa.org/sites/default/files/pub-pdf/AS%20-%20Midwifery%20in%20Difficult%20Times%20in%20Selected%20Countries%202016.pdf).

125. The role of midwives in humanitarian setting [news release]. United Nations Population Fund South Sudan; 28 July 2022 (https://southsudan.unfpa.org/en/news/role-midwives-humanitarian-setting).

126. Beek K, McFadden A, Dawson A. The role and scope of practice of midwives in humanitarian settings: a systematic review and content analysis. Hum Resour Health. 2019;17(1):5 (https://doi.org/10.1186/s12960-018-0341-5).

127. Les sages-femmes pour la paix : le rôle des sages-femmes dans les conflits [news release]. International Confederation of Midwives; 6 April 2022 (https://internationalmidwives.org/fr/les-sages-femmes-pour-la-paix-le-role-des-sages-femmes-dans-les-conflits/).

128. Comment les sages-femmes polonaises aident les Ukrainiennes ayant fui leur logis [news release]. World Health Organization; 4 May 2022 (https://www.who.int/europe/fr/news/item/04-05-2022-how-polish-midwives-help-ukrainian-women-fleeing-their-homes).

129. Purno NH, Biswas A, Anderson R, Hoque DME. Responding to humanitarian crises: midwifery care in Bangladesh. J Midwifery Womens Health. 2023;68(3):371–5 (https://doi.org/10.1111/jmwh.13524).

130. Urgent health challenges for the next decade [news release]. World Health Organization; 13 January 2020 (https://www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade).

131. Myanmar's "red angel" midwives prepare to bring care to displaced women in Rakhine [news release]. United Nations Population Fund; 28 May 2014 (https://www.unfpa.org/news/myanmars-red-angel-midwives-prepare-bring-care-displaced-women-rakhine).

132. Male midwife champions safe motherhood for South Sudan refugees [news release]. United Nations Population Fund; 17 June 2015 (https://www.unfpa.org/news/male-midwife-champions-safe-motherhood-south-sudan-refugees).

133. Health needs escalate as crisis in Gaza continues [news release]. United Nations Population Fund; 24 July 2014 (https://www.unfpa.org/news/health-needs-escalate-crisis-gaza-continues).

134. Amid grinding conflict, Yemen's midwives go to heroic lengths to save lives [news release]. United Nations Population Fund; 4 May 2018 (https://www.unfpa.org/news/amid-grinding-conflict-yemens-midwives-go-heroic-lengths-save-lives).

135. As a midwife, I always feel responsible for two lives at the same time: the mother and her child [news release]. Medecins Sans Frontieres; 10 March 2020 (https://www.msf-me.org/media-centre/news-and-stories/midwife-i-always-feel-responsible-two-lives-same-time-mother-and-her).

136. Coyle R. As a midwife, I have seen what happens to women when they do not receive prenatal care: an MSF midwife shares her story from Taiz Houban, Yemen. ReliefWeb; 15 August 2023 (https://reliefweb.int/report/yemen/midwife-i-have-seen-what-happens-women-when-they-do-not-receive-prenatal-care).

137. Mortensen B, Lieng M, Diep LM, Lukasse M, Atieh K, Fosse E. Improving maternal and neonatal health by a midwife-led continuity model of care: an observational study in one governmental hospital in Palestine. eClinicalMedicine. 2019;10:84–91 (https://doi.org/10.1016/j.eclinm.2019.04.003).

138. Mortensen B, Lukasse M, Diep LM, Lieng M, Abu-Awad A, Suleiman M et al. Can a midwife-led continuity model improve maternal services in a low-resource setting? A non-randomised cluster intervention study in Palestine. BMJ Open. 2018;8(3):e019568 (https://doi.org/10.1136/bmjopen-2017-019568).

139. Midwives in Bangladesh bring hope to survivors of Cyclone Mocha in world's largest refugee camp [news release]. United Nations Population Fund; 15 June 2023 (https://www.unfpa.org/news/midwives-bangladesh-bring-hope-survivors-cyclone-mocha-worlds-largest-refugee-camp).

140. "Hope arrived in the form of Rahna": The life-saving work of midwives after the Afghanistan earthquake [news release]. United Nations Population Fund; 2 November 2023 (https://www.unfpa.org/news/"hope-arrived-form-rahna"-life-saving-work-midwives-after-afghanistan-earthquake).

141. In her words: a heavy monsoon, a flooded hospital and twins on the way: a midwife's story in Bangladesh [news release]. United Nations Population Fund; 7 April 2022 (https://www.unfpa.org/news/her-words-heavy-monsoon-flooded-hospital-and-twins-way-midwifes-story-bangladesh).

142. Kildea S, Simcock G, Liu A, Elgbeili G, Laplante DP, Kahler A et al. Continuity of midwifery carer moderates the effects of prenatal maternal stress on postnatal maternal wellbeing: the Queensland flood study. Arch Womens Ment Health. 2018;21(2):203–14 (https://doi.org/10.1007/s00737-017-0781-2).

143. Idress A, Rehman AU, Mohsin A, Lee KY. Pregnant women lose all hope of help as Pakistan drowns in floods. Health Sci Rep. 2023;6(10):e1082 (https://doi.org/10.1002/hsr2.1082).

144. Hadid D. The fearless midwives of Pakistan: in the face of floods, they do not give up [news release]. NPR; 19 October 2022 (https://www.npr.org/sections/goatsandsoda/2022/10/08/1127631160/midwives-in-pakistan-are-mobilizing-to-help-women-and-children-after-the-floods).

145. Allotey J, Stallings E, Bonet M, Yap M, Chatterjee S, Kew T et al. Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis. BMJ. 2020;370:m3320 (https://doi.org/10.1136/bmj.m3320).

146. Pallangyo E, Nakate MG, Maina R, Fleming V. The impact of COVID-19 on midwives' practice in Kenya, Uganda and Tanzania: a reflective account. Midwifery. 2020;89:102775 (https://doi.org/10.1016/j.midw.2020.102775).

147. Ortiz J, Castro MD. Buenas prácticas de parteras profesionales en respuesta a la pandemia por COVID-19 en América Larina y el Caribe, 2020–2021. Panama City: United Nations Population Fund, Latin America and the Caribbean Regional Office; 2022 (https://lac.unfpa.org/es/publications/buenas-practicas-de-parteras-profesionales).

148. Helping women give birth during the pandemic: the experience of four midwives [news release]. Pan American Health Organization; 5 May 2020 (https://www.paho.org/en/stories/helping-women-give-birth-during-pandemic-experience-four-midwives).

149. UN Regional Information Centre (UNRIC) Brussels. Midwives step up to support pregnant women during pandemic. United Nations; no date (https://www.un.org/en/pregnant-women-are-worried-about-giving-birth-during-pandemic).

150. Amid pandemic and unrest, midwives undeterred in saving lives in Conakry [news release]. United Nations Population Fund; 11 February 2021 (https://www.unfpa.org/news/amid-pandemic-and-unrest-midwives-undeterred-saving-lives-conakry).

151. Schantz C, Tiet M, Evrard A, Guillaume S, Boujahma D, Quentin B et al. A strong capacity to face the shock of the health crisis: MaNaO, a midwife-led birthing centre in France. Midwifery. 2023;127:103837 (https://doi.org/10.1016/j.midw.2023.103837).

152. Islam A, Begum F, Williams A, Basri R, Ara R, Anderson R. Midwife-led pandemic telemedicine services for maternal health and gender-based violence screening in Bangladesh: an implementation research case study. Reprod Health. 2023;20(1):128 (https://doi.org/10.1186/s12978-023-01674-0).

153. Hartz DL, Tracy SK, Pairman S, Yates A, Renard C, Brodie P et al. Midwives speaking out on COVID-19: The International Confederation of Midwives global survey. PLoS One. 2022;17(11):e0276459 (https://doi.org/10.1371/journal.pone.0276459).

154. Coxon K, Turienzo CF, Kweekel L, Goodarzi B, Brigante L, Simon A et al. The impact of the coronavirus (COVID-19) pandemic on maternity care in Europe. Midwifery. 2020;88:102779 (https://doi.org/10.1016/j.midw.2020.102779).

155. Alnuaimi K. Understanding Jordanian midwives' experiences of providing care during the COVID-19 pandemic crisis: a phenomenological study. Int J Community Based Nurs Midwifery. 2021;9(3):238–50 (https://doi.org/10.30476/ijcbnm.2021.88793.1545).

156. Foulhy C, Knezovic N, Guillaume S, Ettienne C, Guignard M, Perrin L. Les sages-femmes face à la crise sanitaire (Midwives facing the health crisis). Sages-Femmes. 2020;19(5):29–32 (https://www.sciencedirect.com/science/article/abs/pii/S1637408820301358).

157. Rousseau A, Gaucher L, Gautier S, Mahrez I, Baumann S. How midwives implemented teleconsultations during the COVID-19 health crisis: a mixed-methods study. BMJ Open. 2022;12(4):e057292 (https://doi.org/10.1136/bmjopen-2021-057292).

158. Attanasio LB, Alarid-Escudero F, Kozhimannil KB. Midwife-led care and obstetrician-led care for low-risk pregnancies: a cost comparison. Birth. 2020;47(1):57–66 (https://doi.org/10.1111/birt.12464).

159. Friedman H, Liang M. Costs of pre-service midwifery education. Background document for the State of the World's Midwifery 2011. June 2011 (https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=c0b2bfdbf46f3884b765bdec933cf9f33c46ce29).

160. Kenny C, Devane D, Normand C, Clarke M, Howard A, Begley C. A cost-comparison of midwife-led compared with consultant-led maternity care in Ireland (the MidU study). Midwifery. 2015;31(11):1032–8 (https://doi.org/10.1016/j.midw.2015.06.012).

161. Petrou S, Boulvain M, Simon J, Maricot P, Borst F, Perneger T et al. Home-based care after a shortened hospital stay versus hospital-based care postpartum: an economic evaluation. BJOG. 2004;111(8):800–6 (https://doi.org/10.1111/j.1471-0528.2004.00173.x).

162. Callander EJ, Slavin V, Gamble J, Creedy DK, Brittain H. Cost-effectiveness of public caseload midwifery compared to standard care in an Australian setting: a pragmatic analysis to inform service delivery. Int J Qual Health Care. 2021;33(2):mzab084 (https://doi.org/10.1093/intqhc/mzab084).

163. Kozhimannil K, Attanasio L, Alarid-Escudero F. More midwife-led care could generate cost savings and health improvement: policy brief. Minneapolis: University of Minnesota School of Public Health; 2019, p. 4 (https://www.sph.umn.edu/sph-2018/wp-content/uploads/docs/policy-brief-midwife-led-care-nov-2019.pdf).

164. Boukhalfa C, Ouakhzan B, Masbah H, Acharai L, Zbiri S. Investing in midwifery for sustainable development goals in low- and middle-income countries: a cost-benefit analysis. Cost Eff Resour Alloc CE. 2024;22(1):1 (https://doi.org/10.1186/s12962-023-00507-y).

165. MacKenzie Bryers H, Van Teijlingen E. Risk, theory, social and medical models: a critical analysis of the concept of risk in maternity care. Midwifery. 2010;26(5):488–96 (https://doi.org/10.1016/j.midw.2010.07.003).

166. McFarland AK, Jones J, Luchsinger J, Kissler K, Smith DC. The experiences of midwives in integrated maternity care: a qualitative metasynthesis. Midwifery. 2020;80:102544 (https://doi.org/10.1016/j.midw.2019.102544).

167. Eri T, Berg M, Dahl B, Gottfreðsdóttir H, Sommerseth E, Prinds C. Models for midwifery care: a mapping review. Eur J Midwifery. 2020 4:30 (https://doi.org/10.18332/ejm/124110).

168. Executive Board, 138. Framework on integrated, people-centred health services: report by the Secretariat. Geneva: World Health Organization; 2016 (EB138/37; https://iris.who.int/handle/10665/250704).

169. International Bill of Human Rights: a brief history, and the two International Covenants. United Nations Office of the High Commissioner for Human Rights; undated (https://www.ohchr.org/en/what-are-human-rights/international-bill-human-rights).

170. Convention on the Elimination of All Forms of Discrimination against Women. New York, 18 December 1979. New York: United Nations; 1980 (https://treaties.un.org/doc/Treaties/1981/09/19810903%2005-18%20AM/Ch_IV_8p.pdf).

171. Convention on the Rights of the Child. New York, 20 November 1989. New York: United Nations; 1989 (https://treaties.un.org/doc/Treaties/1990/09/19900902%2003-14%20AM/Ch_IV_11p.pdf).

172. Convention on the Rights of Persons with Disabilities. New York: United Nations; 2006 (A/RES/61/106; https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html).

173. Programme of Action: adopted at the International Conference on Population and Development, Cairo, 5–13 September, 1994. United Nations Population Fund; 2004 (https://www.unfpa.org/sites/default/files/event-pdf/PoA_en.pdf).

174. Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. New York, 10 December 1984. United Nations Office of the High Commissioner for Human Rights; 1987 (https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-against-torture-and-other-cruel-inhuman-or-degrading).

175. Continuity and coordination of care: a practice brief to support implementation of the WHO Framework on integrated people-centred health services. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/handle/10665/274628). Licence: CC BY-NC-SA 3.0 IGO.

176. Homer CS, Leap N, Edwards N, Sandall J. Midwifery continuity of carer in an area of high socio-economic disadvantage in London: a retrospective analysis of Albany Midwifery Practice outcomes using routine data (1997–2009). Midwifery. 2017;48:1–10 (https://doi.org/10.1016/j.midw.2017.02.009).

177. Hadebe R, Seed PT, Essien D, Headen K, Mahmud S, Owasil S et al. Can birth outcome inequality be reduced using targeted caseload midwifery in a deprived diverse inner city population? A retrospective cohort study, London, UK. BMJ Open. 2021;11(11):e049991 (https://doi.org/10.1136/bmjopen-2021-049991).

178. Khan Z, Vowles Z, Fernandez Turienzo C, Barry Z, Brigante L, Downe S et al. Targeted health and social care interventions for women and infants who are disproportionately impacted by health inequalities in high-income countries: a systematic review. Int J Equity Health. 2023;22(1):131 (https://doi.org/10.1186/s12939-023-01948-w).

179. Kildea S, Gao Y, Hickey S, Nelson C, Kruske S, Carson A et al. Effect of a Birthing on Country service redesign on maternal and neonatal health outcomes for First Nations Australians: a prospective, non-randomised, interventional trial. Lancet Glob Health. 2021;9(5):e651–9 (https://doi.org/10.1016/s2214-109x(21)00061-9).

180. Thompson JE. Midwives and human rights: dream or reality? Midwifery. 2002;18(3):188–92 (https://doi.org/10.1054/midw.2002.0320).

181. Dharni N, Essex H, Bryant MJ, Cronin De Chavez A, Willan K et al., on behalf of the Better Start Bradford Innovation Hub. The key components of a successful model of midwifery-led continuity of carer, without continuity at birth: findings from a qualitative implementation evaluation. BMC Pregnancy Childbirth. 2021;21(1):205 (https://doi.org/10.1186/s12884-021-03671-2).

182. Brigante L, Coxon K, Fernandez Turienzo C, Sandall J. "She was there all the time": a qualitative study exploring how women at higher risk for preterm birth experience midwifery continuity of care. Women Birth. 2023;36(4):e397–404 (https://doi.org/10.1016/j.wombi.2023.01.003).

183. Mathias LA, Davis D, Ferguson S. Salutogenic qualities of midwifery care: a best-fit framework synthesis. Women Birth. 2021;34(3):266–77 (https://doi.org/10.1016/j.wombi.2020.03.006).

184. Tokhi M, Comrie-Thomson L, Davis J, Portela A, Chersich M, Luchters S. Involving men to improve maternal and newborn health: a systematic review of the effectiveness of interventions. PLoS One. 2018;13(1):e0191620 (https://doi.org/10.1371/journal.pone.0191620).

185. Yargawa J, Leonardi-Bee J. Male involvement and maternal health outcomes: systematic review and meta-analysis. J Epidemiol Community Health. 2015;69(6):604–12 (https://doi.org/10.1136/jech-2014-204784).

186. Kraft JM, Wilkins KG, Morales GJ, Widyono M, Middlestadt SE. An evidence review of gender-integrated interventions in reproductive and maternal-child health. J Health Commun. 2014;19(Suppl 1):122–41 (https://doi.org/10.1080/10810730.2014.918216).

187. Xie J, Hunter A, Biesty L, Grealish A. The impact of midwife/nurse-led psychosocial interventions on parents experiencing perinatal bereavement: an integrative review. Int J Nurs Stud. 2024;157:104814 (https://doi.org/10.1016/j.ijnurstu.2024.104814).

188. Facilitating evidence-based practice in nursing and midwifery in the WHO European Region. Copenhagen: World Health Organization Regional Office for Europe; 2017 (https://iris.who.int/handle/10665/353672).

189. Building the primary health care workforce of the 21st century. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/328072). Licence: CC BY-NC-SA 3.0 IGO.

190. Filby A, McConville F, Portela A. What prevents quality midwifery care? A systematic mapping of barriers in low and middle income countries from the provider perspective. PLoS One. 2016;11(5):e0153391 (https://doi.org/10.1371/journal.pone.0153391).

191. Mattison CA, Lavis JN, Wilson MG, Hutton EK, Dion ML. A critical interpretive synthesis of the roles of midwives in health systems. Health Res Policy Syst. 2020;18(1):77 (https://doi.org/10.1186/s12961-020-00590-0).

192. World Health Organization, Organisation for Economic Co-operation and Development, International Bank for Reconstruction and Development. Delivering quality health services: a global imperative for universal health coverage. Geneva: World Health Organization; 2018 (https://iris.who.int/handle/10665/272465). Licence: CC BY-NC-SA 3.0 IGO.

193. Kalaris K, Radovich E, Carmone AE, Smith JM, Hyre A, Baye ML et al. Networks of care: an approach to improving maternal and newborn health. Glob Health Sci Pract. 2022;10(6):e2200162 (https://doi.org/10.9745/ghsp-d-22-00162).

194. Agyekum EO, Kalaris K, Maliqi B, Moran AC, Ayim A, Roder-DeWan S. Networks of care to strengthen primary healthcare in resource constrained settings. BMJ. 2023;380:e071833 (https://doi.org/10.1136/bmj-2022-071833).

195. Framework for action on interprofessional education and collaborative practice. Geneva: World Health Organization; 2010 (https://iris.who.int/handle/10665/70185).

Annex 1. The International Confederation of Midwives (ICM) philosophy of midwifery care and model of midwifery care

ICM philosophy of midwifery care

- Pregnancy and childbearing are usually normal physiological processes.
- Pregnancy and childbearing are a profound experience, which carries significant meaning to the woman, her family and the community.
- Midwives are the most appropriate care providers to attend childbearing women.
- Midwifery care promotes, protects and supports women's human, reproductive and sexual health and rights, and respects ethnic and cultural diversity. It is based on the ethical principles of justice, equity, and respect for human dignity.
- Midwifery care is holistic and continuous in nature, grounded in an understanding of the social, emotional, cultural, spiritual, psychological and physical experiences of women.
- Midwifery care is emancipatory as it protects and enhances the health and social status of women and builds women's self confidence in their ability to cope with childbirth.
- Midwifery care takes place in partnership with women, recognizing the right to self-determination, and is respectful, personalized, continuous and non-authoritarian.
- Ethical and competent midwifery care is informed and guided by formal and continuous education, scientific research and application of evidence.

ICM model of midwifery care

- Midwives promote and protect women's and newborns' health and rights.
- Midwives respect and have confidence in women and in their capabilities in childbirth.
- Midwives promote and advocate for non-intervention in normal childbirth.
- Midwives provide women with appropriate information and advice in a way that promotes participation and enhances informed decision-making.
- Midwives offer respectful, anticipatory and flexible care, which encompasses the needs of the woman, her newborn, family and community, and begins with primary attention to the nature of the relationship between the woman seeking midwifery care and the midwife.
- Midwives empower women to assume responsibility for their health and for the health of their families.
- Midwives practice in collaboration and consultation with other health professionals to serve the needs of the woman, her newborn, family and community.
- Midwives maintain their competence and ensure their practice is evidence-based.
- Midwives use technology appropriately and effect referral in a timely manner when problems arise.
- Midwives are individually and collectively responsible for the development of midwifery care, educating the new generation of midwives and colleagues in the concept of lifelong learning.

Source: Philosophy and model of midwifery care. International Confederation of Midwives; 2014 (https://internationalmidwives.org/resources/philosophy-and-model-of-midwifery-care/).

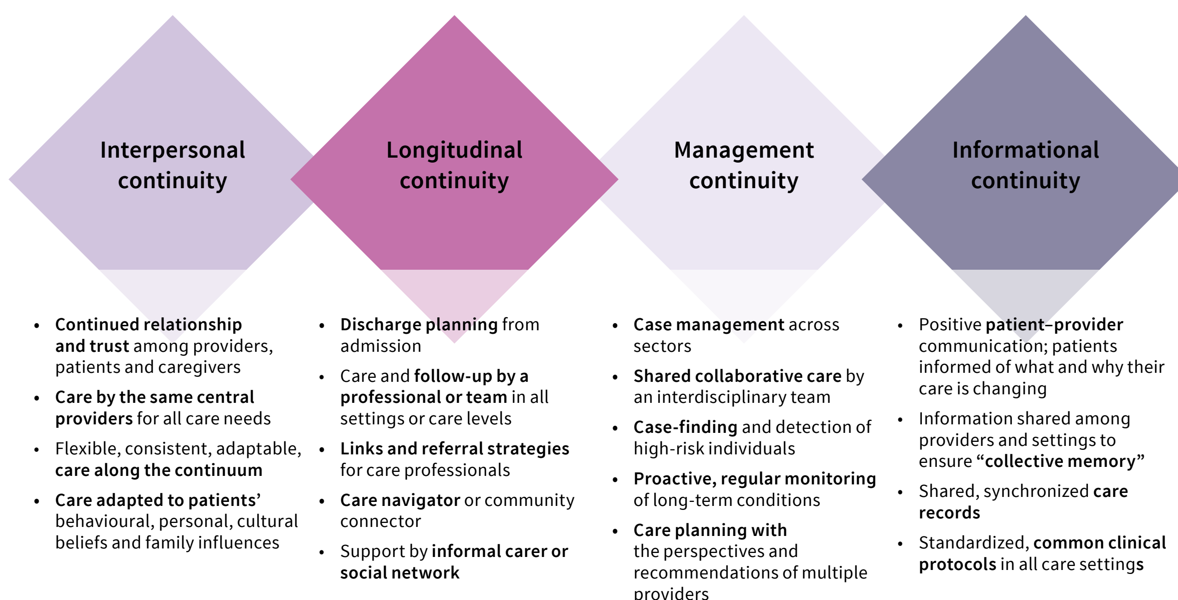
Annex 2. Continuity of care and ways to achieve it

Continuity of care has been framed by Deeny et al. (2017) as a complex concept with four domains:

- interpersonal continuity – the subjective experience of the caring relationship between patients and health workers;
- longitudinal continuity – a history of interaction with the same health worker in a series of discrete episodes;
- management continuity – effective collaboration of teams across care boundaries to provide seamless care; and
- informational continuity – the availability of clinical and psychosocial information at all encounters with professionals *(1,2)*.

The approaches and interventions that can be used to achieve continuity of care – within each of these domains – are listed in Fig. A1.1 below.

Fig. A1.1 The range of approaches and interventions for achieving continuity of care



Source: WHO, 2018 *(1)*, adapted from Deeny et al., 2017 *(2)*.

References for Annex 2

1. Continuity and coordination of care: a practice brief to support implementation of the WHO Framework on integrated people-centred health services. Geneva: World Health Organization; 2018 (https://apps.who.int/iris/handle/10665/274628). Licence: CC BY-NC-SA 3.0 IGO.
2. Deeny S, Gardner T, Al-Zaidy S, Barker I, Steventon A. Briefing: reducing hospital admissions by improving continuity of care in general practice. London: The Health Foundation; 2017 (https://www.health.org.uk/sites/default/files/ReducingAdmissionsGPContinuity.pdf).

World Health Organization

20 Avenue Appia
1211 Geneva 27
Switzerland

Department of Maternal, Newborn, Child and Adolescent Health and Ageing
Email: mncah@who.int
Website: https://www.who.int/teams/maternal-newborn-child-adolescent-health-and-ageing
www.who.int