# SAFE CHILDBIRTH CHECKLIST LANDSCAPE ANALYSIS

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MOMENTUM works alongside governments, local and international private and civil society organizations, and other stakeholders to accelerate improvements in maternal, newborn, and child health services. Building on existing evidence and experience implementing global health programs and interventions, we help foster new ideas, partnerships, and approaches and strengthen the resiliency of health systems.

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# CONTENTS

# ABBREVIATIONS

| | |
|---|---|
| **EBP** | Evidence-based practices |
| **FIGO** | International Federation of Gynecology and Obstetrics |
| **ICM** | International Confederation of Midwives |
| **MAKLab** | Measurement, Adaptive Learning, and Knowledge Management Lab |
| **RMNC** | respectful maternal and newborn care |
| **SCC** | Safe Childbirth Checklist |
| **UNFPA** | United Nations Population Fund |
| **UNICEF** | United Nations Children's Fund |
| **WHO** | World Health Organization |

# BACKGROUND AND AIMS

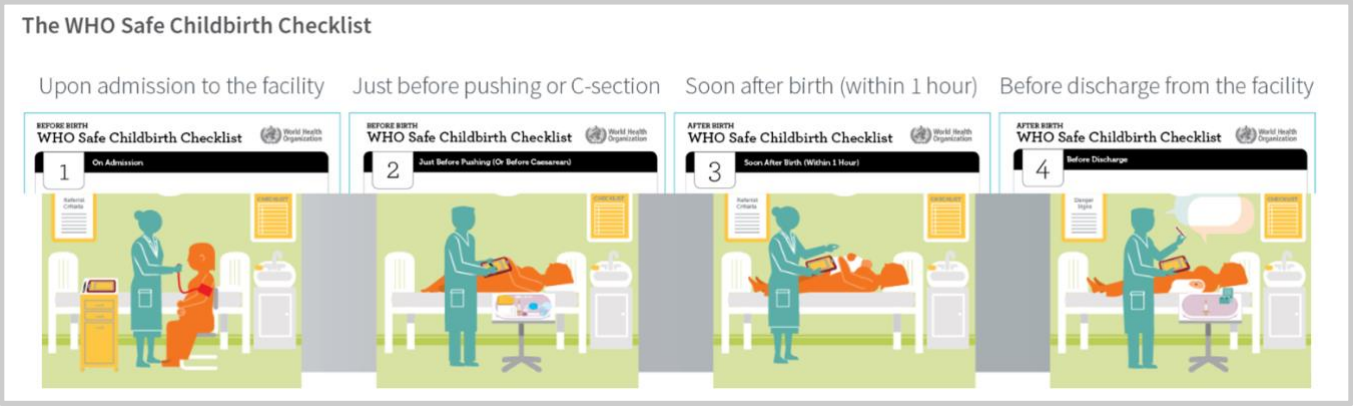
Globally, almost 135 million births occurred in 2023 (United Nations Population Division, 2024), and around 285,000 women* die each year due to pregnancy or childbirth-related causes (World Health Organization [WHO], 2024b). According to the WHO, the most frequent causes of maternal mortality are postpartum hemorrhage, infection after childbirth, and high blood pressure during pregnancy. Most of these deaths occur in low- and middle-income countries, and most complications that result in maternal death are preventable and treatable with access to high-quality care (WHO, n.d.-b).

Every year more than 2 million neonatal deaths occur, and an additional 2 million stillbirths are registered after 28 weeks of pregnancy (WHO, 2024a & UNICEF, 2023). The primary causes of neonatal death are premature birth/low birth weight, birth asphyxia and trauma, neonatal infections, and congenital anomalies (WHO, 2024a). Globally, neonatal death accounts for 47 percent of deaths in children under age 5 (WHO, n.d.-a. & UNICEF, 2024), and an estimated 42 percent of all stillbirths occur during the intrapartum period (Hug et al., 2021). These data suggest that improving access to timely, high-quality care during childbirth and the first days of life would improve health outcomes and reduce the risk of death for women and newborns.

The WHO and Ariadne Labs developed the Safe Childbirth Checklist (SCC) in 2009 to improve outcomes during childbirth, specifically reducing maternal and newborn morbidity and mortality, focusing on four pause points (see Figure 1).

- Pause point 1: upon admission to the health facility.
- Pause point 2: just before pushing or cesarean section.
- Pause point 3: soon after birth (within one hour).
- Pause point 4: before discharge from the health facility.

### Figure 1: The WHO Safe Childbirth Checklist




Source: Ariadne Labs, 2019.

* We acknowledge the spectrum of gender identities of people with the reproductive capacity for pregnancy and birth, including transgender and gender-diverse people, as well as adolescent girls. In this document, we use the term "woman/women," and we acknowledge that this term is gendered and that not all people who give birth identify as women.


PHOTO: KAREN KASMAUSKI/MCSP

The SCC is designed to remind birth attendants of the evidence-based practices (EBP) to implement with every woman and newborn during every birth, and it has shown a positive impact on health outcomes (de Meneses Sousa et al., 2022; Li et al., 2023; Kaplan et al., 2021).

More than 10 years after its launch, many countries have implemented the SCC. A forthcoming systematic review (by Fernandez-Elorriaga et al., in partnership with WHO) finds evidence that SCC use reduces stillbirths and improves adherence to EBP. Since the release of the SCC, a number of updated and relevant global guidelines on childbirth have been published and put into use. New EBP have been added to these guidelines, and respectful maternal and newborn care (RMNC) has received more attention around the world. Given these developments, there is a need for a redesign of the tool.

MOMENTUM Safe Surgery in Family Planning and Obstetrics (MOMENTUM Safe Surgery) assists country governments, institutions, organizations, and networks to promote awareness of, equitable access to, and high quality of care for voluntary and consented safe surgeries within maternal health and family planning programs. The project supports the introduction and use of quality improvement tools, including the SCC, in its work. The project engaged the MOMENTUM Measurement, Adaptive Learning, and Knowledge Management Lab (MAKLab) in November 2023 to conduct a landscape analysis to identify and analyze new evidence-based global recommendations and guidelines to consider for integration into an updated SCC. This document includes the findings from that analysis as well as a mapping of how guidance for vaginal, assisted, and/or surgical birth overlaps, diverges, and reconnects over the care pathway. This information will help guide MOMENTUM Safe Surgery as it considers how to ensure that new surgical obstetric care quality improvement tools align with broader efforts to strengthen obstetric care across delivery modes. These findings will also be used by the WHO during a future human-centered design process to refresh the SCC. Additionally, we expect these findings will be useful to anyone providing care along the birth care pathway. To this end, we have provided an example mapping of some national-level guidelines to the care pathway (see Appendix 4). MOMENTUM Safe Surgery will support its country teams to conduct similar mappings to help them identify gaps in national guidelines and consider supplementing them with relevant, global guidelines identified in this analysis.


PHOTO: ALLAN GICHIGI/MCSP

# METHODS

## Global Guidelines

We began the landscape analysis by conducting a desk review to identify existing clinical recommendation documents, statements, and guidelines developed in the last 15 years (between 2009 and 2023). We exclusively sought global guidelines and systematic reviews and identified them through searches on Google and through search functions on the websites of the WHO, International Federation of Gynecology and Obstetrics (FIGO), International Confederation of Midwives (ICM), United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), Section on Global Health with the American Academy of Pediatrics (AAP), and Partnership for Maternal, Newborn, and Child Health (PMNCH). We solicited input from experts at MAKLab, MOMENTUM Safe Surgery, and the WHO to share relevant documents. These experts comprised individuals who have used or implemented the SCC, developers of guidelines, and obstetrician-gynecologists. We included any global guidelines that were designed to be used in a clinical setting; were specifically intended for use during childbirth or immediate postpartum care, as defined by our care pathway (see below); and included EBP.

We listed all identified resources on a spreadsheet, including the following information from each:

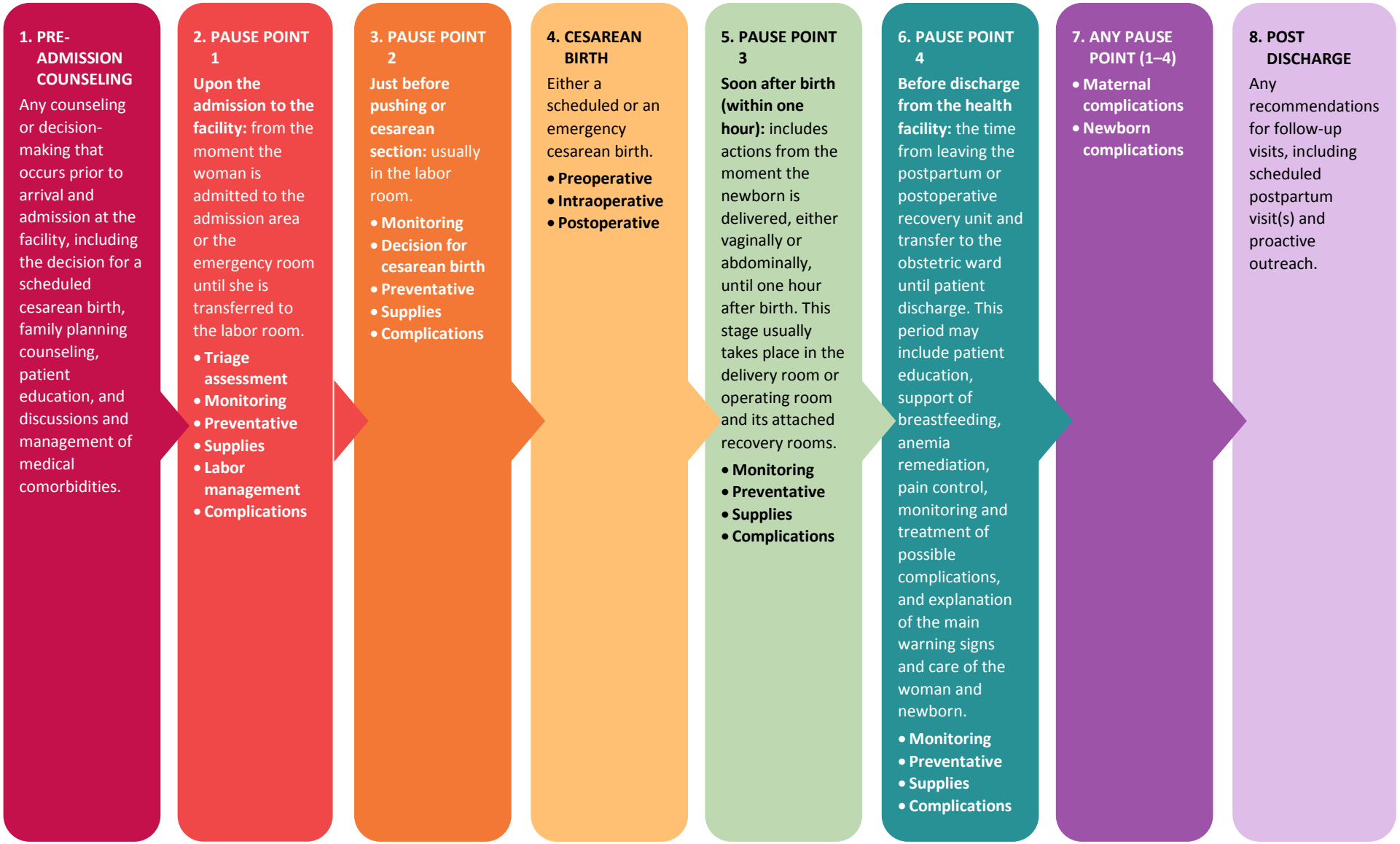
- Name of tool.
- Organization or developer.
- Stakeholders mentioned.
- Country/region.
- Type of resource (guidelines, statement, clinical decision aid, or systematic review).
- Type of birth (vaginal, assisted, surgery, or any type of birth).
- Pause point(s) in care pathway addressed by the checklist.
- Type of attention (triage, preventive, monitoring, supplies, or complications).
- Inclusion of RMNC.
- Information about the implementation or evaluation.
- References to family planning.
- Additional notes.

## Defining a Care Pathway

The MAKLAB team simultaneously adapted a care pathway developed with MOMENTUM Safe Surgery in 2023 for cesarean births to encompass all types of birth by integrating it with the existing pause points of the SCC and some additional, relevant moments during labor and delivery (Figure 2). The purpose of the care pathway is to help identify where critical, new guidelines fit within the course of care for inclusion in the updated SCC and to help policymakers and health providers identify gaps in the guidelines currently used in their countries or facilities. The proposed care pathway includes the following points:

1. **Pre-admission counseling**: any counseling or decision-making that occurs prior to arrival and admission at the facility, including the decision for a scheduled cesarean birth, family planning counseling, patient education, and discussions and management of medical comorbidities.
2. **Pause point 1: upon the admission to the facility**: from the moment the woman is admitted to the admission area or the emergency room until she is transferred to the labor room.
    a. **Triage assessment**: the decisions and assessments that take place after arrival at the facility and prior to admission with disposition to home, hospital, or transfer.
    b. **Admission**: the decision to admit the patient to the birth ward after triage assessment.
    c. **Monitoring**: recording and supervision of vital signs and other alarm signs of the woman and fetus/newborn.
    d. **Preventive**: actions aimed to avoid or reduce the onset of maternal or newborn complications and subsequent negative outcomes on the health of woman and newborn.

## Figure 2. Care Pathway for Cesarean Births



e. **Supplies**: necessary resources (materials and medications) that must be available for the proper care of woman and newborn.
f. **Labor managemen**t: progress of and care during labor.
g. **Complications**: unexpected situations that put the health of the woman and/or the fetus/newborn at risk and that may produce negative outcomes on their health. Examples include preeclampsia, hemorrhage, and unstable fetal condition.

3. **Pause point 2**: **just before pushing or cesarean section**: usually in the labor room.
    a. **Monitoring**: *See definition above.*
    b. **Decision for cesarean birth**: medical conditions for which cesarean birth is recommended, for example: failure of labor to progress, concern for the fetus/newborn, problems with the placenta, or breech presentation. Cesarean birth can be performed at the request of women (elective cesarean).
    c. **Preventive**: *See definition above.*
    d. **Supplies**: *See definition above.*
    e. **Complications**: *See definition above.*
4. **Cesarean birth**: either a scheduled or an emergency cesarean birth.
    a. **Preoperative**: the time from the decision for cesarean to entering the operating room. This period may include the woman and her companions informed, consent obtained, pre-operative huddle, bladder catheterization, dosing existing epidural, and clipping.
    b. **Intraoperative**: the time from the moment the patient enters the operating room until they leave the operating room. This period may include skin preparation; vaginal preparation; skin entry; uterine incision and expansion; uterine repair and closure; fascia, subcutaneous tissue, and skin closure; counts; and immediate newborn care.
    c. **Postoperative**: the time from leaving the operating room through immediate recovery. This period may include urinary drainage, venous thromboembolism prophylaxis, surgical site monitoring, promotion of skin-to-skin bonding, and monitoring of lochia.
5. **Pause point 3**: **soon after birth (within one hour)**: includes actions from the moment the newborn is delivered, either vaginally or abdominally, until one hour after birth. This stage usually takes place in the delivery room or operating room and its attached recovery rooms.
    a. **Monitoring**: *See definition above.*
    b. **Preventive**: *See definition above.*
    c. **Supplies**: *See definition above.*
    d. **Complications**: *See definition above.*
6. **Pause point 4: before discharge from the health facility**: the time from leaving the postpartum or postoperative recovery unit and transfer to the obstetric ward until patient discharge. This period may include patient education (especially with regards to family planning), support of breastfeeding, anemia remediation, pain control, monitoring and treatment of possible complications, and explanation of the main warning signs and care of the woman and newborn.
    a. **Monitoring**: *See definition above.*
    b. **Preventive**: *See definition above.*
    c. **Supplies**: *See definition above.*
    d. **Complications**: *See definition above.*
7. **Any pause point (1-4)**
    a. **Maternal complications**: complications that can occur at any point along the care pathway (pre delivery, during birth, or after birth). Some common complications are obstructed labor, placenta problems, preeclampsia/eclampsia, postpartum hemorrhage, postpartum infections, and others.
    b. **Newborn complications**: complications that can occur at any point along the care pathway (pre delivery, during birth or after birth). Some common complications are fetal instability, bradycardia, prematurity/low birth weight, infection, asphyxia or trauma, genetic disorders, and others.

8. **Post discharge**: any recommendations for follow-up visits, including scheduled postpartum visit(s) and proactive outreach.

Finally, we used the care pathway to develop an ecosystem map of the identified tools. We mapped each tool by type and point on the care pathway to allow us to visually identify areas of abundance and gaps.

## Country-Level Guidelines

To help us identify gaps in existing national guidelines and triangulate them with global guidelines, MOMENTUM Safe Surgery provided some guidelines currently in use in project implementation countries for review and analysis.

We conducted a review of these provided national guidelines, including those with clinical recommendations and excluding any training manuals/packages/strategies, operational guidelines, multi-pronged and coordinated policy approach documents, and standard/indicators lists. To review information included in the national guidelines, we used the same extraction and mapping process used for the global guidelines.

# SUMMARY OF FINDINGS

## Types of Resources

The landscape analysis identified 46 resources meeting our criteria for review. We classified each resource as either a guideline, systematic review, statement, or clinical decision aid. Resources were further categorized by type of birth: vaginal, assisted, cesarean, or any type of birth. For classification purposes, we considered all categories mutually exclusive. We identified 40 guidelines, four statements, two clinical decision aids, and no systematic reviews. A list of all identified resources can be found in Appendix 1. All identified resources were developed by international professional organizations, such as FIGO, ICM, and the WHO. Other international organizations, including UNICEF, UNFPA, White Ribbon Alliance, and the International Pediatric Association, contributed to some of the included guidelines. All resources contained global (not context-specific) recommendations and were publicly available.

Of the 46 resources, we classified 33 (72 percent) as relevant for any type of birth, eight for vaginal birth, four for cesarean birth, and one for assisted births. Among all resources, the most common main topic was postpartum hemorrhage, with 15 resources focused on this complication. Table 1 shows the number of resources by main topic and beneficiary. The difference in the number of guidelines focused exclusively on the woman (*n* = 21; 46 percent) compared to those focused just on the newborn (*n* = 4; 9 percent) was particularly notable. Further, many guidelines included information about topics beyond the main topic identified; for the purposes of this review, we extracted only the topic with the greatest amount of information.

**Table 1: Number of Resources by Beneficiary/Patient and Main Topic**

| BENEFICIARY/PATIENT | MAIN TOPIC | NUMBER OF RESOURCES |
|---|---|---|
| Woman/newborn dyad (*n* = 21) | Postpartum | 4 |
| | Induction/augmentation | 4 |
| | Intrapartum | 3 |
| | Preterm birth | 3 |
| | Cesarean | 2 |
| | Breastfeeding | 2 |

| BENEFICIARY/PATIENT | MAIN TOPIC | NUMBER OF RESOURCES |
|---|---|---|
| | General well-being | 2 |
| | Pregnancy to postpartum | 1 |
| Woman only (*n* = 21) | Postpartum hemorrhage | 15 |
| | Infection | 5 |
| | Preeclampsia/eclampsia | 1 |
| Newborn only (*n* = 4) | Care/complications | 4 |

## Audience/Users

The recommendations in most of the resources (*n* = 38; 83 percent) were intended for broad, global application. However, eight guidelines or statements noted that their recommendations were intended specifically for resource-constrained countries.

Given the number of individuals involved in birth across the care pathway and the importance of caring for both the woman and the newborn simultaneously, we extracted information about the individuals mentioned in each resource. The targeted audience for each is described in Table 2; the categories are not mutually exclusive. Different types of stakeholders will use and apply the information according to their roles; for example, birth attendants or care providers would apply evidence-based guidelines during birth care, while individuals responsible for developing protocols or academics/training planners would use them to design action and training programs that incorporate the best available evidence. Only one of the guidelines included women's and parents' groups as part of its target audience.

### Table 2: Target Audience for Resources: Absolute (n) and Relative (%) Frequency

| AUDIENCE | NUMBER OF GUIDELINES | % OF ALL RESOURCES |
|---|---|---|
| Birth attendants involved in the provision of care to women and newborns during labor and childbirth (e.g., midwives, nurses, general medical practitioners, obstetricians, pediatricians, etc.) | 40 | 87% |
| Policymakers and relevant staff in ministries of health | 33 | 72% |
| Managers of maternal and child health programs | 29 | 63% |
| Health care professionals responsible for developing national and local guidelines and protocols | 28 | 61% |
| Training institutions | 19 | 41% |
| Women's and parents' groups | 1 | 2% |

## Care Pathway

We developed a visual ecosystem map to demonstrate how identified resources fit into the care pathway and to see points in the care pathway that are not addressed by current tools (see Appendix 2).

Throughout the pathway, most resources focus on recommendations for the care of the woman rather than the newborn (see Table 3). The WHO's *Intrapartum Care for a Positive Childbirth Experience and Pregnancy, Childbirth, Postpartum* and *Newborn Care: A Guide for Essential Practice (3rd edition)* were the most comprehensive we identified. Particularly, *Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide for Essential Practice (3rd edition)* included recommendations for both women and newborns at all pause points and all types of attention (triage, preventive, monitoring, supplies, or complications).

### Table 3: Resource Focus of Care for Women and Newborns

| FOCUS ON CARE PATHWAY | WOMEN | NEWBORN |
|---|---|---|
| Pause point 1 | 11 | 0 |
| Pause point 2 | 7 | 2* |
| Pause point 3 | 22 | 9 |
| Pause point 4 | 14 | 9 |
| Any pause point (1-4) | 4 | 5 |
| Post-discharge | 6 | 6 |

*The fetus is still inside the woman during pause point 1 through cesarean birth; however, two resources specifically mention fetal monitoring in pause point 2 and therefore are included as newborn related.

We found 11 guidelines with pause point 1 recommendations primarily focused on labor management in vaginal births. There was a lack of recommendations on triage and monitoring in pause point 1, an area that could be relevant for stillbirth reduction. Only seven guidelines for women provided EBP in pause point 2, and most of those focused on preventive attention. There may be a need to further emphasize fetal monitoring during pause point 2 for the prevention of complications such as intrapartum stillbirth, asphyxia, or delayed birth of the newborn. Very few guidelines presented recommendations on cesarean birth ($n$ = 6), with only one focused on the decision for a cesarean birth and zero specifically addressing the intraoperative period. Almost half of the guidelines ($n$ = 22; 48 percent) were focused on pause point 3 (women) and were specifically recommendations related to prevention and complications. In pause point 3, among the guidelines related to the woman/newborn dyad, only one pertained to newborn complications. Nevertheless, four specific guidelines focused on recommendations for newborn complications. Recommendations on pause point 4 mainly focused on predischarge preventative care for women ($n$ = 10) compared to newborns ($n$ = 8). Six of the guidelines included mention of family planning. The information presented in the care pathway related to discharge corresponds mainly to issues of prevention and community care of the woman and newborn as well as follow-up visits necessary to monitor their health.

## Inclusion of RMNC

We reviewed all guidelines for their inclusion of recommendations related to RMNC. We found that 37 percent ($n$ = 17) addressed this issue in one of the following ways: respectful treatment of the woman within the framework of human rights, in particular sexual and reproductive health and rights; woman-centered care; health care providers sensitive to the woman's needs, preferences, and/or wishes; willingness to engage in shared decision-making; and

respect for the woman's dignity, privacy, and autonomy. The following guidelines were particularly attentive to respectful care for women:


- *WHO Recommendations on Health Promotion Interventions for Maternal and Newborn Health 2015* (WHO)
- *Mother-Baby Friendly Birthing Facilities* (FIGO)
- "FIGO Good Clinical Practice Paper: Management of the Second Stage of Labor" (FIGO)
- *WHO Recommendations: Intrapartum Care for a Positive Childbirth Experience* (WHO)

However, only the last on this list, the WHO intrapartum care recommendations, specifically used the term "respectful maternity care." And although some of the listed resources mentioned the newborn, none of them used the term RMNC, which is inclusive of the newborn.

## Family Planning

Only 13 percent of resources mentioned family planning – most often focusing on counseling – while the rest had no mention of it. Two resources talked about ensuring the woman was comfortable having her partner present for family planning counseling. In addition to counseling, one of the resources talked about family planning in the context of task sharing for postnatal care delivery. Lastly, one of the criteria for qualifying a facility as "mother-baby friendly" was offering family planning services. The following guidelines included some language on family planning:

- *WHO Recommendations on Maternal and Newborn Care for a Positive Postnatal Experience* (WHO)
- *WHO Recommendations on Postnatal Care of the Mother and Newborn* (WHO)
- *Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide for Essential Practice (3rd edition)* (WHO, United Nations Population Fund, UNICEF)
- *WHO Recoimmendations on Health Promotion Interventions for Maternal and Newborn Health* (WHO)
- *Mother-Baby Friendly Birthing Facilities* (FIGO)
- *Guidelines for the Management of Common Childhood Illnesses* (WHO)

## Evaluation and Implementation

Seventy-four percent (*n* = 34) of the resources reviewed included considerations for implementation; however, being global guidelines, none provided comprehensive implementation recommendations. Most of the guidelines that contained some implementation directives emphasized the need to develop an implementation plan adapted to the context. Twelve guidelines (26 percent) made no mention of implementation.

Information on evaluation and monitoring of implementation recommendations was largely restricted to providing select metrics through regularly measured indicators. Only 33 percent of all resources mentioned data collection, and all of those suggested doing it through time series or clinical audits (i.e., comparing current practices against established standards and guidelines to identify areas for improvement) in the health facilities. In terms of which indicators could be collected through time series or clinical audits, the following were explicitly mentioned:

- Proportion of women giving birth by cesarean section who received alcohol-based chlorhexidine gluconate for skin preparation.
- Incidence of peripartum infection among women giving birth by cesarean section.
- Proportion of women giving birth by cesarean section who received vaginal preparation with chlorhexidine gluconate or povidone-iodine.

- Incidence of peripartum infection among women giving birth by cesarean section.
- Proportion of women undergoing operative vaginal birth who receive antibiotic prophylaxis.
- Incidence of peripartum infection among women undergoing operative vaginal birth.
- Proportion of women giving birth by cesarean section who received antibiotic prophylaxis (by class of antibiotics).
- Incidence of peripartum infection among women giving birth by cesarean section.
- Proportion of women undergoing cesarean section who receive antibiotic prophylaxis.
- Proportion of women with preterm prelabor rupture of membranes (PPROM) who receive antibiotic prophylaxis.
- Incidence of surgical wound infection among women undergoing cesarean section.
- Proportion of pregnant women who have an ultrasound prior to 24 weeks of gestation.
- Proportion of pregnant women who have a documented indication for undergoing induction of labor.
- Induction of labor as a proportion of all births.
- Proportion of women receiving the locally agreed first option method of induction of labor.
- Cesarean section rate among women undergoing induction of labor.
- Augmented labor as a proportion of all births.
- Vaginal birth rate among women undergoing labor augmentation for delay in active labor.
- Cesarean section rate among women undergoing labor augmentation for delay in active labor.
- For obtaining relevant data related to antenatal corticosteroid therapy.

Eighteen (39 percent) of the guidelines use the WHO's *Standards for Improving Quality of Maternal and Newborn Care in Health Facilities* as the reference document for the indicators. This document provides a list of prioritized input, output, and outcome measures that can be used to define quality of care criteria and indicators and that should be aligned with locally agreed-upon and relevant targets. The WHO's *Guideline: Iron Supplementation in Postpartum Women* suggests the use of existing resources like *WHO/CDC eCatalogue of Indicators for Micronutrient Programmes* and *WHO Global Targets Tracking Tool* that allows users to explore different scenarios to achieve the rates of progress. More than half of the guidelines (52 percent) suggest considering specific indicators and include indicator names, numerators, and denominators. Fifteen (33 percent) of the guidelines do not provide any information on how to monitor or evaluate the outcomes and potential impact of the recommendations they provide, although three say that monitoring and evaluation should be built into the implementation process.

## Findings in Country-Level Guidelines

In total, 16 national-level resources were provided from four different countries (see list of resources in Appendix 3). Half of these (*n* = 8) met the criteria for inclusion in our analysis (see Table 4). None were restrictive by type of birth; therefore, all were classified as guidelines for any type of birth.

**Table 4: Number of Resources Provided and Selected for Analysis, by Country**

| COUNTRY | RESOURCES PROVIDED | RESOURCES SELECTED FOR ANALYSIS |
|---|---|---|
| Ethiopia | 2 | 2 |
| India | 8 | 2 |
| Kenya | 1 | 1 |
| Rwanda | 5 | 3 |

All guidelines were developed by the corresponding national ministry of health, and the intended audiences were primarily health professionals attending women and newborns at the facility level.

A mapping of these resources to the care pathway is provided in Appendix 4. The areas with the greatest number of guidelines were maternal complications (in pause point 3), maternal complications before discharge (in pause point 4), and general maternal complications relevant to any pause point. In general, the country-level guidelines were fairly comprehensive. The two resources included from Ethiopia together addressed 34 out of the 38 subcategories in our care pathway, as did the three resources from Rwanda. The resource from Kenya addressed 33 subcategories. The two resources from India were more specific in their scope and together only addressed six subcategories. However, it is important to note that the country-level resources we received were not collected in a systematic manner and may not be representative of the guidelines actually used in these countries. Areas not well represented by the included national guidelines included pre-admission and post-discharge care recommendations, suggesting that a redesigned SCC may benefit from focusing on these areas.


PHOTO: MR. JANIKRAMAN/ABHIRAMI PHOTO STUDIO

When evaluating for inclusion of RMNC, we found that half of the included national guidelines ($n$ = 4) mentioned the importance of considering the rights of women and providing respectful care to them. One of the Rwandan guidelines recommends providing "woman friendly care." The Kenya guideline mentioned "Clients Rights" and that high-quality client-provider interactions require respectful care. The most comprehensive approach was in the two Ethiopian guidelines; both use respectful maternal care terminology and use the first chapter of the guideline to address this issue. Similar to what we found in the global guidelines, although some of the national guidelines mention the newborn, none of them used the term RMNC, which is inclusive of the newborn.

# CONCLUSIONS

In our mapping, it became evident that most of the identified recommendations were applicable to any type of birth. One key difference between the global and national guidelines was that the global presented a strikingly higher number of recommendations for women compared to newborns, while the national guidelines were more balanced. This disparity may be partly due to the fact that national guidelines tend to address birth care with recommendations throughout the entire care pathway (from admission to discharge), whereas global guidelines focus on particular moments in the care pathway or on specific complications. Another factor might be that while providers are delivering high-quality care to women in pause points 1 and 2, they are also caring for the fetus. More recommendations in pause point 1 around monitoring and prevention could be helpful for early identification of risks so that they can be addressed in a timely manner or appropriately referred.

Due to the number of guidelines and recommendations that have been published since the SCC, there are areas of opportunity for updating and improvement of the checklist, including review and redesign to incorporate new EBP. Additionally, the practice we undertook of mapping existing national guidelines to our proposed care pathway (Appendix 4) may be beneficial for other users. By noting deficits in existing country-level guidelines, facility managers and policymakers may use our mapping of new global guidelines to incorporate relevant new recommendations into the provision of care.

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# APPENDIX 1: LIST OF GLOBAL GUIDELINES

| | MAIN TOPIC | RESOURCE TITLE | PUBLICATION YEAR |
|---|---|---|---|
| 1 | All process | *Pregnancy, Childbirth, Postpartum and Newborn Care: A Guide for Essential Practice (3rd edition)* | 2015 |
| 2 | Augmentation | *WHO Recommendations for Augmentation of Labour* | 2014 |
| 3 | Breastfeeding | *Guideline: Counselling of Women to Improve Breastfeeding Practices* | 2018 |
| 4 | Breastfeeding | *Guideline: Protecting, Promoting and Supporting Breastfeeding in Facilities Providing Maternity and Newborn Services* | 2017 |
| 5 | Cesarean | *WHO Recommendations: Non-Clinical Interventions to Reduce Unnecessary Caesarean Sections* | 2018 |
| 6 | Cesarean | *Robson Classification: Implementation Manual* | 2017 |
| 7 | Hemorrhage | *WHO Recommendations on the Assessment of Postpartum Blood Loss and Use of a Treatment Bundle for Postpartum Haemorrhage* | 2023 |
| 8 | Hemorrhage | *ICM Guidance on the Use of Heat-Stable Carbetocin as an Alternative to Oxytocin in the Prevention of Postpartum Haemorrhage* | 2023 |
| 9 | Hemorrhage | *FIGO Recommendations on the Management of Postpartum Hemorrhage 2022* | 2022 |
| 10 | Hemorrhage | *FIGO + ICM Generic Postpartum Haemorrhage Protocol and Care Pathways* | 2022 |
| 11 | Hemorrhage | *WHO Recommendation on Uterine Balloon Tamponade for the Treatment of Postpartum Haemorrhage* | 2021 |
| 12 | Hemorrhage | *ICM Joint Statement of Recommendation for the Use of Uterotonics for the Prevention of Postpartum Haemorrhage* | 2021 |
| 13 | Hemorrhage | *ICM Recommendation for the Use of Tranexamic Acid for the Treatment of Postpartum Haemorrhage* | 2021 |
| 14 | Hemorrhage | *WHO Recommendation on Routes of Oxytocin Administration for the Prevention of Postpartum Haemorrhage After Vaginal Birth* | 2020 |
| 15 | Hemorrhage | *WHO Recommendation on Advance Misoprostol Distribution to Pregnant Women for Prevention of Postpartum Haemorrhage* | 2020 |
| 16 | Hemorrhage | *WHO Recommendation on Umbilical Vein Injection of Oxytocin for the Treatment of Retained Placenta* | 2020 |

| | MAIN TOPIC | RESOURCE TITLE | PUBLICATION YEAR |
|---|---|---|---|
| 17 | Hemorrhage | *WHO Recommendations: Uterotonics for the Prevention of Postpartum Haemorrhage* | 2018 |
| 18 | Hemorrhage | *WHO Recommendation on Tranexamic Acid for the Treatment of Postpartum Haemorrhage* | 2017 |
| 19 | Hemorrhage | *FIGO Non-Pneumatic Anti-Shock Garment to Stabilize Women with Hypovolemic Shock Secondary to Obstetric Hemorrhage* | 2015 |
| 20 | Hemorrhage | *WHO Recommendations for the Prevention and Treatment of Postpartum Haemorrhage* | 2012 |
| 21 | Hemorrhage | *FIGO Prevention and Treatment of Postpartum Hemorrhage in Low-Resource Settings* | 2012 |
| 22 | Induction | *WHO Recommendations on Mechanical Methods for Induction of Labour* | 2022 |
| 23 | Induction | *WHO Recommendations on Induction of Labour, at or Beyond Term* | 2022 |
| 24 | Induction | *WHO Recommendations for Induction of Labour* | 2011 |
| 25 | Infection | *WHO Recommendations on Choice of Antiseptic Agent and Method of Application for Preoperative Skin Preparation for Caesarean Section* | 2021 |
| 26 | Infection | *WHO Recommendation on Vaginal Preparation with Antiseptic Agents for Women Undergoing Caesarean Section* | 2021 |
| 27 | Infection | *WHO Recommendation on Routine Antibiotic Prophylaxis for Women Undergoing Operative Vaginal Birth* | 2021 |
| 28 | Infection | *WHO Recommendation on Prophylactic Antibiotics for Women Undergoing Caesarean Section* | 2021 |
| 29 | Infection | *WHO Recommendations for Prevention and Treatment of Maternal Peripartum Infections* | 2015 |
| 30 | Intrapartum | *FIGO Good Clinical Practice Paper: Management of the Second Stage of Labor* | 2020 |
| 31 | Intrapartum | *WHO Recommendations: Intrapartum Care for a Positive Childbirth Experience* | 2018 |
| 32 | Intrapartum | *FIGO Consensus Guidelines on Intrapartum Fetal Monitoring: Physiology of Fetal Oxygenation and the Main Goals of Intrapartum Fetal Monitoring* | 2015 |
| 33 | Newborn | *WHO Recommendations for Care of the Preterm or Low-Birth-Weight Infant* | 2022 |

| | MAIN TOPIC | RESOURCE TITLE | PUBLICATION YEAR |
|---|---|---|---|
| 34 | Newborn | *WHO Recommendations on Newborn Health: Guidelines Approved by the WHO Guidelines Review Committee* | 2016 |
| 35 | Newborn | *Guidelines for the Management of Common Childhood Illnesses* | 2013 |
| 36 | Newborn | *Guidelines on Basic Newborn Resuscitation* | 2012 |
| 37 | Preeclampsia | *WHO Recommendations for Prevention and Treatment of Pre-Eclampsia and Eclampsia* | 2011 |
| 38 | Preterm | *WHO Recommendations on Antenatal Corticosteroids for Improving Preterm Birth Outcomes* | 2022 |
| 39 | Preterm | *WHO Recommendation on Tocolytic Therapy for Improving Preterm Birth Outcomes* | 2022 |
| 40 | Preterm | *WHO Recommendations on Interventions to Improve Preterm Birth Outcomes* | 2015 |
| 41 | Postpartum | *WHO Recommendations on Maternal and Newborn Care for a Positive Postnatal Experience* | 2022 |
| 42 | Postpartum | *Guideline: Iron Supplementation in Postpartum Women* | 2016 |
| 43 | Postpartum | *WHO Recommendations on Postnatal Care of The Mother And Newborn* | 2013 |
| 44 | Postpartum | *Vitamin A Supplementation in Postpartum Women* | 2011 |
| 45 | Well-being | *WHO Recommendations on Health Promotion Interventions for Maternal and Newborn Health 2015* | 2015 |
| 46 | Well-being | *FIGO Mother–Baby Friendly Birthing Facilities* | 2014 |

# APPENDIX 2: ECOSYSTEM MAPPING FOR GLOBAL GUIDELINES

*Ecosystem Mapping for Global Guidelines* (MOMENTUM Knowledge Accelerator)

# APPENDIX 3: LIST OF COUNTRY-LEVEL GUIDELINES

| COUNTRY | NAME OF RESOURCE (LINK) | YEAR | SELECTED (Y/N) |
|---|---|---|---|
| India | SUMAN: standard operational guidelines | 2020 | No |
| | Manyata Clinical standards | -- | No |
| | STANDARD TREATMENT Guidelines Obstetrics and Gynaecology | -- | Yes |
| | Technical Guidelines for Engaging General Surgeons to Perform Caesarean Sections and Manage Obstetric Complications | 2014 | No |
| | Facility standards Manyata | 2019 | No |
| | DAKSHATA. Empowering Providers for Improved MNH Care during Institutional Deliveries. A strategic initiative to strengthen quality of intra- and immediate postpartum care | 2015 | No |
| | LAQSHYA: Labour room quality improvement iniciative | 2017 | No |
| | Guidance Note on Prevention and Management of Postpartum Haemorrhage | 2015 | Yes |
| Rwanda | Integrated National Health Sector Referral Guidelines (INHSRG) | 2015 | No |
| | Obstetric protocols Rwanda | 2020 | Yes |
| | Emergency Obstetrics and newborn care. Training Manual | -- | Yes |
| | Guidelines for basic and comprehensive emergency obstetric and newborn care | 2020 | No |
| | RWANDA STANDARD TREATMENT GUIDELINES. Obstetrics and gynecology. Vol 4 | 2022 | Yes |
| Kenya | National Guidelines for quality Obstetric and perinatal care | -- | Yes |
| Ethiopia | OBSTETRICS MANAGEMENT PROTOCOL For Health Centers | 2021 | Yes |
| | MANAGEMENT PROTOCOL ON SELECTED OBSTETRICS TOPICS FOR HOSPITALS | 2020 | Yes |

# APPENDIX 4: ECOSYSTEM MAPPING FOR COUNTRY-LEVEL GUIDELINES

*Ecosystem Mapping for Country-Level Guidelines* (MOMENTUM Knowledge Accelerator)