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Mapping the newborn care documents in UNICEF Eastern and Southern African countries – looking for needles in a haystack

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Contents

Acronyms

AMHPSS	Adolescent mental health and psychosocial support
CO	Country office
DHS	Demographic and Health Survey
EmONC	Emergency obstetric and newborn care
ENAP	Every Newborn Action Plan
ESAR	Eastern and Southern African region
HIE	Hypoxic-ischaemic encephalopathy
HMIS	Health Management Information System
IMNCI	Integrated Management of Newborn and Child Illnesses
KMC	Kangaroo mother care
M&E	Monitoring and evaluation
MICS	Multiple Indicator Cluster Survey
MNCH	Maternal, newborn and child health
MNH	Maternal and newborn health
MoH	Ministry of Health
NBU	Newborn baby unit
NE	Neonatal encephalopathy
NICU	Neonatal intensive care unit
NNAP	National Newborn Action Plan
PSBI	Possible serious bacterial infection
RMNACHN	Reproductive Maternal Newborn Child Adolescent Health and Nutrition
RMNCAH	Reproductive Maternal Newborn Child and Adolescent Health
SARA	Service Availability and Readiness Assessment
SRMNCAH	Sexual Reproductive Maternal Newborn Child and Adolescent Health
SSN	Small and sick newborn
UNICEF	United Nations Children's Fund
WHO	World Health Organization

Executive summary

Background

UNICEF works with governments and partners in 21 countries in the Eastern and Southern Africa Region (ESAR) to advocate and support the realization of children's rights. Although the ESAR has seen significant progress in child survival, reduction in neonatal mortality remains slow at an estimated 23.83 per 1000 live births in 2019. The study reported here was aimed at providing information on the availability of comprehensive guidelines for the care of small and sick newborns (SSNs) and perinatal death audit in this region. For this purpose a mapping exercise was conducted on the regionally available documents related the care of SSNs (provided by UNICEF ESAR country offices) and to give an overview of the content and quality of documents with regard to information and reference to the care of SSNs.

Reduction in neonatal mortality remains slow at an estimated 23.83 per 1000 live births in 2019

Methods

Documents were collected between 8 January and 15 May 2021 via the UNICEF ESAR office Maternal and Child Specialist. Details of each document were captured on an Excel database. The 2019 monitoring database for the Every Newborn Action Plan (ENAP) in the ESAR countries was also made available. French and Portuguese document received less attention due to the consultants' lack of proficiency in these languages. For the clinical guidelines and protocol documents a table was created to summarise impressions of the content and quality of documents. The tables of contents of ENAP documents were scrutinised for similarities and striking points and a few additional calculations were done on the 2019 ENAP database.

A vast number of documents were submitted, some more relevant than others. The collected documents speak to the ideal, but do not give information on the reality of what is happening on the ground. The consultants were also not well informed about the levels of care in each country and what was possible in each context.

Findings

Document types and content

The majority of the 172 documents in the database are in English (73%). The number of documents received per country ranged between 1 and 23. One of the first impressions during the review is captured by the metaphor of "looking for needles in a haystack" in a fragmented document landscape, making it difficult to compare documents across countries. Documents received were dependent on what each of the UNICEF country offices had access to. Quite a number of documents were still in draft format and some were not dated.

In order to classify documents an *11-category typology* was developed. Some documents covered more than one category (topic/focus). The main headings were the following:

1. Assessment reports and situation analyses (n=21)
2. Strategic planning documents (n=29)
3. Country ENAP documents and tools (n=14)
4. Quality of care (n=17)
5. Standards documents (n=12)
6. Guideline documents (n=29)
7. Management of newborns and other protocols (n=10)
8. Training materials (n=17)
9. MPDSR documents (n=8)
10. Miscellaneous tools, checklists and reporting forms (n=16)
11. Other (n=15)

Care of the small and sick newborns was mostly subsumed in general newborn care or maternal and newborn care documents. There were 6 documents with KMC guidelines. The main report contains a detailed discussion on each of the document categories.

Care topics highlighted for more attention

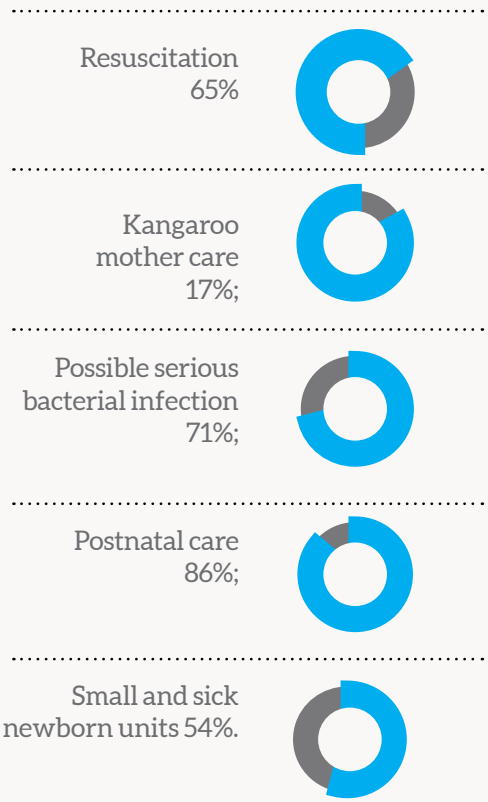
- **Feeding of preterm and sick newborns.** Many documents lack full information and guidance on the feeding of preterm infants. Details are discussed in the main report.
- **Neonatal jaundice** is covered well in most country guidelines; however, they differ as to when phototherapy should start and end.
- **Neonatal encephalopathy versus hypoxic-ischaemic encephalopathy (birth asphyxia).** A subsection is devoted to explain the difference between the two terms and when it is preferable to use the term neonatal encephalopathy instead of hypoxic-ischaemic encephalopathy (HIE).

Highlights from the ENAP database

The analysis of the 2019 ENAP database for the ESA countries revealed a number of gaps with regard to absence of focal persons and national technical working groups (TWGs) for maternal and newborn health. There were variations in meeting schedules and the nature of the TWG(s) that covered newborn health. Seventeen countries indicated that they had a national newborn action plan; two had a plan in progress and two had no plan.

For five newborn care interventions, the percentage of health facilities that indeed provided the planned-for intervention was as follows:

All 21 countries had a target for their neonatal mortality rates, which ranged between 7 and 33 per 1000 live births. However, the year for achieving the target ranged between 2020 and 2035. Thirteen countries had a perinatal death review system in place. More than 80% had an indicator for maternal mortality, stillbirths, immediate initiation of breastfeeding, and low birth weight in their health management information system (HMIS).



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Recommendations

Document storage

A more systematic approach to the storage of country documents in the format of an 'archive' may make it easier to find relevant documents according to specific topics or in the format of a framework on the types of documents that should be available in countries to improve the care of neonates and children, especially the SSNs.

From policy to practice at grassroots

Having guideline documents does not necessarily mean they are implemented in practice. No information was available to the consultants on the actual operationalisation of the guidelines. Countries are encouraged to get a better sense of the gaps in clinical leadership and the collaboration models between clinicians and government officials and use this information for reflection and conducting surveys.

A focus on the feeding of small and sick newborns

In previous studies on KMC implementation, appropriate feeding of preterm infants was found to be one of the biggest challenges. UNICEF ESAR could consider a learning programme focusing on health care workers' knowledge and skills to teach and support the mother in feeding her *small newborn* as one of the topics to launch through learning networks. There are many more aspects to consider than what is taught in general breastfeeding trainings, for example the importance of non-nutritive sucking, getting the balance right between feeding at the breast and feeding expressed breastmilk via cup or gastric tube, and the oral stimulation of babies with feeding difficulties.

Every Newborn Action Plans: progress with implementation targets of interventions

Some ENAP documents have detailed implementation frameworks with target dates but information was not available on how well countries managed to keep to their targets for implementing actions or interventions. Activities to address this gap could include a self-evaluation survey across UNICEF ESAR countries and systematic in-country reflection on own progress.

Nurturing learning from each other: in-country and across countries

An ideal outcome of this mapping exercise would be the sharing of documents in-country and across countries, where permitted, and using the WHO standards for SSNs as a vehicle to create learning opportunities.

Keeping updated through reliable resources

Currently many existing resources have a section on the care of SSNs. It is almost impossible to provide a comprehensive annotated list of all reliable resources as knowledge is continuously expanding and changing. A short list of reliable websites from which information could be sourced is provided in Annexure E.

Choice of terminology for document titles

A number of terms encountered in the documents received may not be interpreted the same and some clarification is needed: policy, standard, (clinical) guide(line), pocket guide, protocol, standard operating procedure (SOP), procedure. A diagram is provided to explain some of the differences between these. Other terms for reflection on their use are: workshop vs. training; and supervision vs. mentoring and coaching.

Key questions for country offices

How do we get through to the reality on the ground?

Collaboration

- There a variety of donor, development and NGO partners present in each country. It is not clear how these partners liaise with each other and how much synergy there is between the different partners' activities and agendas. This may result in duplications and overlaps of guideline documents. What can country offices (COs) do to support a harmonisation process that will ensure that different entities collaborate more closely together and that documents are shared more freely?
- How effective are national- and subnational-level RMNCAH working groups? Can COs play a role to strengthen them?
- What kind of collaboration exists between clinicians and government in each country? Do COs have a role to play in assisting optimal liaison and enhancing the pool of clinical leadership and governance skills in a country? How can COs assist with finding a balance between aspirations and reality?
- How can COs support initiatives to establish in-country or across-country learning networks for the care of small and sick newborns?
- How can important newborn care documents be shared across countries for COs to be more aware of activities in other countries and learn from good experiences elsewhere?

Facilitation and mediation

- The ENAP database of 2019 showed that the planned set-up of KMC services only materialised for 17% of health facilities. Some country offices have supported with providing infrastructure and equipment. There is, however, a need for support on the leadership and governance side to accelerate this process. How can COs assist with supporting leaders and managers with their tasks??

- How are COs involved or will they be involved in the adoption, adaptation and dissemination of the WHO standards for improving the quality of care for small and sick newborns in health facilities? What will be the best way of getting the messages to grass roots: the development of a standards document or other ways that may have a greater effect?

- How can COs support quality improvement programmes in health facilities and at other levels of the health system to include KMC and other issues related to small newborns?

- How can COs facilitate the endorsement of international statements pertaining to the care of sick and small newborns by in-country professional associations (e.g. the joint international statement of KMC)?

Information and communication

- There are many documents with some information or guidelines of newborn health and some have hidden in-between parts on the care of small or sick newborns. Can COs keep a more systematic, regularly updated record of all documents in which matters of newborn care, especially the care of small and sick newborn care, are discussed?

- How do COs currently assist government to stay informed and updated about the care of small and sick newborns? How can this assistance be improved?
  Guideline documents get outdated very quickly. How can the COs assist with identifying outdated information and providing support for ensuring that new information reaches the grassroots before revised guidelines are published?

- Many of the documents from the different countries lacked the full information and guidance on the feeding of preterm infants. More appropriate and more detailed practical guidelines are needed for these newborns. Gaps relate, amongst others, to cup-and tube-feeding in the skin-to-skin position, manual expression of breastmilk, calculation of feed volumes, introduction of breastmilk feeding, practical feeding schedules, initiation of suckling at the breast, and assisting a newborn with feeding difficulties. How can COs assist with addressing these gaps?

Investigation

- Having guideline documents does not necessarily mean they are implemented in practice. How can COs assist with investigating
  - if and how guidelines are disseminated to reach grassroots level?
  - to what extent these guidelines are operationalised in practice?
- Some countries' Every Newborn action plans (ENAP) have detailed implementation frameworks with target dates. How well have countries managed to keep to their targets for implementing actions or interventions? How can COs assist with, for example, collecting information on whether a country has been able to keep to its implementation targets? How can COs assist government with reflecting on their progress with ENAP?
- Can COs conduct surveys and embark on implementation research like the following?
  - Mapping existing documents more systematically, to report on how clinical leadership is organised in the country and how national guidelines are implemented?
  - Plotting existing practices in hospitals with neonatal units in a country or in the hospitals that fall within the UNICEF areas of support against the guidelines included in the official documents?
  - Implementation of immediate KMC and family-centred care?
  - Documentation in newborn units (NBUs) and neonatal intensive care units (NICUS)?

The way forward: support for implementation of small and sick newborn care

- Keeping the concept of 'do no harm' in mind, which aspects of the WHO standards for sick and small newborns are COs planning to implement and how?
- What is the plan for the institutionalisation of standards – moving away from the project mode?
- How will the implementation process and the results be documented?
- How will the results be monitored and how are you going to ensure evidenced-based planning and decision making at all levels, including national, sub-national and health facility level?
- How will advocacy based on the findings during the implementation process be documented?
- How do resilience, scalability and sustainability feature in implementation plans?

Background

In the Eastern and Southern Africa Region (ESAR), UNICEF works in 21 countries. These are: Angola, Botswana, Burundi, Comoros, Eritrea, Ethiopia, eSwatini, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Rwanda, Somalia, South Africa, South Sudan, Tanzania, Uganda, Zambia and Zimbabwe. In each country, UNICEF works with the Government and partners to advocate and support the realization of children's rights. UNICEF's work broadly focuses on the five key priorities, namely to:

- enable children to survive and thrive;
- reduce stunting;
- improve education quality and learning outcomes;
- improve adolescent development participation and protection; and
- scale up social protection.

Over the past few decades, the ESAR has seen significant progress in child survival. However, there is still much to be done, particularly with regard to the very slow progress to reduce neonatal mortality – the estimate for ESAR in 2019 was 23.83 per 1000 live births,[1] which is still far off the Sustainable Development Goal of 12 deaths per 1000 live births by 2030.[2]

More than 80 per cent of these newborns could have lived because their causes of death – complications due to prematurity, birth complications including lack of oxygen at birth (asphyxia), and neonatal infections – are preventable or treatable.

The contract between the University of Pretoria and UNICEF ESAR office aims to strengthen ESAR's capacity to provide contextualised, quality and sustained support to country offices with regard to the care of small and sick newborns (SSNs) and perinatal death audit. Improved treatment of complications of prematurity and working on the reduction of the preventable causes of death of SSNs are important focuses for further reducing neonatal mortality and morbidity rates. To this end the World Health Organization (WHO) published its 'Standards for improving the quality of care for SSNs in health facilities' in 2020.[3]

The estimate for ESAR in 2019 was 23.83 per 1000 live births, which is still far off the Sustainable Development Goal of 12 deaths per 1000 live births by 2030

1 IGME (UN Inter-Agency Group for Child Mortality Estimation). Data and estimates. Eastern and Southern Africa. Neonatal mortality rate. https://childmortality.org/data/UNICEF%20Regions%20%3E%20Eastern%20and%20Southern%20Africa. Downloaded 2021-06-06.

2 World Health Organization. Health in 2015: from MDGs to SDGs. Geneva: World Health Organization; 2015

3 World Health Organization (WHO). Standards for improving the quality of care for small and sick newborns in health facilities. Geneva: WHO; 2020.

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Aim and objectives

Aim

To conduct a mapping exercise on the regionally available documents related the care of SSNs and to give an overview of the content and quality of documents provided by the UNICEF ESAR country offices with regard to information and references to the care of SSNs.

Objectives

- To identify content covered in existing documents with regard to the care of SSNs that were supported by UNICEF or for which UNICEF provided inputs.
- To compare the content of documents with the newly released WHO global SSN standards of care, where applicable.
- To identify gaps in newborn care documents (including clinical protocols and guidelines) with regard to uniformity, accuracy, completeness, and being up to date.
- To propose recommendations based on the WHO global standards for SSNs.

Methodology

Request for documents

The maternal and child health specialist at the UNICEF ESAR office sent a circular to all the ESAR country offices on 8 January 2021 requesting them to share documents in the ambit of newborn care, and especially the care of small and sick newborns. This is what the request included:

"We want to start this joint venture by mapping exercise on the regionally available sick and small newborn care units standards/guidelines. To embark on this task, I would like to request you to please share ALL the relevant available documents (standards, policies, guidelines, ENAP, SRMNCAH plan, protocols, standards) linked to newborn care (both essential and advanced). It would be great to share documents related to services delivery (SARA/ EmONC) assessments."

The documents were collected between 8 January and 28 June 2021. The consultants were also provided with the 2019 monitoring database for the Every Newborn Action Plan (ENAP) in the ESAR countries.

Managing the documents

Because of the large number of documents received we drafted a living tracking document in Excel and entered data under the following headings:

- Country
- Date received
- Document number
- Document title
- Language
- Format
- Number of pages
- Date published
- Status (?, draft, final)
- Publisher and partners
- Content summary
- Action date
- Action description
- Date progress report
- Progress description
- Remarks / reminders

The document with the full details of all documents is contained in a separate appendix file in Excel.[4] Countries were entered alphabetically and a unique number of 1-21 was allocated to each country. UNICEF ESAR office was added as number 22 and lists documents that span more than one country and were provided by the regional office. For each country, each document was numbered from 1 to x. This number functioned as a document ID and is used as reference. We added information to the tracking documents as we received more documents and as we worked through the documents so that we could also keep track of our own progress. For French and Portuguese documents their English titles were also added.

4 <APPENDIX 1 DOCUMENT TRACKING FINAL.xls>

We first sifted the documents into two broad categories of documents: "guidelines and protocols" and "other". One consultant (EvR) analysed the guidelines and protocols and the second consultant (A-MB) scanned the rest of the documents with more attention to standards and ENAP documents.

Many of the "other" documents just had side references to preterm or sick newborns and neonatal mortality rates and causes of death. Obstetric documents mostly had a section on neonatal resuscitation, with a few including some aspects of KMC and other sick newborn information. As documents were analysed, summaries were added to the tracking document in the following columns: content summary, action description, progress description and remarks/reminders. Colour coding was also used to check the status of analysis of documents and colour coded tags were added in the country column for some documents (e.g. Guide[lines], Protocol, Norms/standards, ENAP, QI & QoC, Strategic plan, Assess[ment], SARA, Tool, DHS).

Document analysis

The consultants started with the English documents because of language limitation with regard to doing an in-depth analysis of the French and Portuguese documents.

For the clinical guidelines and protocol documents we created a table to summarise impressions of the content and quality of documents under the following headings: "Topics well covered", "Gaps", "Outdated / Problematic information" and "Other remarks".

The other documents were scanned using search terms such as "preterm", "low birth weight"/"LBW", "newborn", "neonat*", "small", "sick" and "kangaroo mother care"/"KMC". In some documents these were highlighted in yellow but no further analysis was done. For some documents page references and short notes were added in the tracking document either in the column "Content summary" or in the column "Action description".

We also created a Standards template with two columns. In the left-hand the WHO SSN standards were listed verbatim and in the right-hand column we added information found in the country documents. For countries with relevant documents we created individualised templates that we populated in the right-hand column with relevant information. All documents that contained "Norms" or "Standards" in the title were analysed, as well as documents with a section on standards. For some countries information from the guidelines and protocol documents was also added (e.g. Zimbabwe), but this was too labour intensive to do for all countries. References to country information started with the document number (e.g. D4) and page number(s) (e.g. p4), followed by a summary of the content in the document or a direct quotation if it was short or similar to the WHO wording. The countries for which an individualised standards template was created and populated are contained in a separate zip appendix file.[5]

The tables of contents of ENAP documents were scrutinised for similarities and striking points. Their tables of content were added to the tracking document. A few additional calculations were done on the 2019 ENAP database provided by UNICEF ESAR office with a view to get a sense of the situation in each country. Some information was summarised in table format (Annexure A). The populated versions of the templates referred to here are available as a separate zip file.[6]

5 <APPENDIX 2 STANDARDS COMPLETED TEMPLATES.zip>

6 <APPENDIX 3 WORK ON ENAP DOCUMENTS.zip>

Findings

The overall picture

Documents received

We received 172 documents via the UNICEF ESAR office Maternal and Child Specialist and sourced a few ourselves (up to 28 June 2021). The two UNICEF ESAR documents listed in the tracking document are excluded. Table 1 gives a breakdown of documents according to country of origin and language and format of the documents. The number of documents received per country ranged between 1 and 23. The majority of documents were in English (73%).

Table 1: Breakdown of number of documents per country of origin, language and format

Countries	No.
Botswana	1
Burundi, Comoros, South Sudan	2
Eritrea, Eswatini	4
Somalia	5
Lesotho, South Africa, Zimbabwe	6
Rwanda, Tanzania, Zambia	8
Kenya, Namibia	9
Angola, Ethiopia	10
Mozambique	12
Malawi	13
Uganda	22
Madagascar	23
TOTAL NUMBER OF DOCUMENTS	**172**

Languages	No.
English	125
French	27
Portuguese	20

Format	No.
PDF	104
Word	57
PPT	9
JPEG	1
Excel	1

A fragmented document landscape

It is widely acknowledged that elements of newborn care and the care of SSNs (where they are addressed) are dispersed across different government and partner documents. This was confirmed by our analysis. The documents received gave a very fragmented overall pictures. For some countries there are only a few documents and other countries like Madagascar sent a whole range pertaining to newborn care (and mortality) in some way of the other. This made it difficult to compare documents across all countries and we tried to focus on the more relevant documents like newborn care and the care of SSNs guidelines and protocols, and norms and standards.

Some other observations around the fragmented nature of the documents received are the following:

1. Not all extremely relevant documents were forwarded from some of the county offices. For example, in the ENAP database 17 countries (81%) indicated that they had a national newborn care action plan (NNAP) / every newborn action plan (ENAP), with two countries "in process". We, however, received only 10 documents (one from a country that still had the "in process" status [Comoros]); for two countries we only received an ENAP tool (Tanzania and Uganda); for one country only a PowerPoint presentation on the Every Newborn bottleneck analysis (Zambia); and for one country the date for finalisation of the ENAP appears as 2016 in the ENAP database, but the ENAP document received was a draft zero with a date of "10-09-20" in the file name (Zimbabwe). It is not clear whether the latter is a next revision of a previous ENAP document.

2. One third of the documents were in Word format and there were also documents with comment boxes in the margin, an indication that it was not the final version of the document. It would have been too time-consuming to follow up with each country office to obtain the latest possible version and it was also not sure whether the UNICEF country office was in possession of a more final version of the documents for which drafts were forwarded for this project.

3. At least 28 documents did not have a year of "publication", so it was difficult to sometimes assess the information against a timeframe. Where there was a date of "publication", the years ranged between 2006 and 2021. Most dated documents were from 2013 onwards.

4. The status of documents could not be established in all cases, whether it was a draft or a final version. For 28 documents there was no indication of status. Others appeared to be final but it was not confirmed. Two documents had an edition number (Eritrea and Mozambique).

We speculate that the numbers and types of documents received could be dependent on any one or more of the following factors:

- Most of the documents available are either Ministry of Health (MoH) documents or documents to which UNICEF has made a contribution (technical assistance or funding).
- Documents are still in progress and the latest version may not have been shared with UNICEF colleagues.
- There may be other important documents drafted in collaboration with development agencies that may pertain to a certain part of a country and these are often shared with the Ministry of Health but not with other partners.
- UNICEF country officers may have different mandates in terms of what they may share or not.
- UNICEF officials in different countries may have different interpretations of what they should/could share.
- Some Ministries of Health may be more reluctant to share documents, especially those in draft format.
- Newly appointed UNICEF officials may be less informed about the availability of documents.
- Institutional memory regarding the existence of documents may be lost when MoH or UNICEF officials move on to other positions.
- Some country offices may be more systematic in keeping a record of relevant documents in the country.

Types of documents received

In our quest to get a grip on the focus of the different documents received, we developed an 11-category typology to classify documents. Some documents covered more than one category (topic/focus). Below is the list of categories with the focus and topics included in each category. A more detailed table with the country names and number of documents per topic/focus is found in Annexure B.

12. **Assessment reports and situation analyses (n=21):**
    Health programmes and services (maternal and newborn, EmONC); functionality (newborn corners, NICUs, health facilities); quality of care; research (newborn study); service availability and readiness assessment (SARA); ENAP bottleneck analysis; indicators (DHS & MICS)

13. **Strategic planning documents (n=29):**
    Reproductive, maternal, newborn, child and adolescent health (RMNCAH); newborn health and survival; quality improvement; general policies and plans

14. **Country ENAP documents and tools (n=14):**
    ENAP policy documents; commitment document; ENAP tool; bottleneck analysis

15. **Quality of care (n=17):**
    Policies, plans and operational guides; norms and standards; assessment; checklists and other tools

16. **Standards documents (n=12):**
    RMNCAH; maternal and newborn care; neonatal care; obstetric care; care of children and adolescents; services

17. **Guideline documents (n=29):**
    Maternal and newborn; newborn; small and sick newborns; KMC; postnatal; other (including antenatal and intrapartum care, EmONC, care for children, essential medicines list)

18. **Management of newborns and other protocols (n=10):**
    Maternal and newborn or newborn; small and sick newborns; KMC; paediatrics under 5; other (obstetrics, infection)

19. **Training materials (n=17):**
    Newborn care; small and sick newborns; EmONC; Helping Babies Breathe; other (MPDSR, village health teams); facilitators' manuals; participants' manuals

20. **MPDSR documents (n=8):**
    Guides and plans; training manual; tools; commitment (decree)

21. **Miscellaneous tools, checklists and reporting forms (n=16):**
    KMC checklists; audit forms; supervision and mentorship forms; ENAP tools; quality of care checklists

22. **Other (n=15):**
    Care; packages; research; handbook for mothers; job aid, health sector and other general documents

Care of the small and sick newborns was mostly subsumed in general newborn care or maternal and newborn care documents. There were 6 documents with KMC guidelines. For the following countries we did not receive a neonatal protocol or guideline with details on the clinical management of newborns or SSNs: Somalia, Sudan and Zambia. The documents from the Lusophone and Francophone countries were not evaluated.

It may be that these protocols do not exist or that they are drafted and kept by the teaching hospitals and may not necessarily be shared widely as official government documents.

Documents containing norms and standards

Details of the norms and standards documents are contained in the tracking document mentioned above. The following countries had documents with either "standards" or "norms" in the document title: Burundi, Kenya, Madagascar, Malawi, Mozambique, Rwanda, Uganda, Zambia. Documents with chapters on norms or standards were received from South Africa and Zimbabwe.

We only received one document based on the full 2016 WHO Standards for improving quality of maternal and newborn care in health facilities [7] from Kenya. A document from Burundi listed these standards but the rest of the document was not organised in a similar way. From Malawi there was a document based on the 2018 WHO Standards for improving the quality of care for children and young adolescents in health facilities.[8] One document was devoted to obstetric norms and standards organised around basic equipment, medications and service packages and human resources at each level of care (Rwanda).

Two countries provided a tool for measuring standards (Mozambique, Uganda). Documents also used one or more of the following categories for organising their newborn norms and standards (sometimes for different levels of care) (Madagascar, Rwanda, South Africa, Uganda, Zambia, Zimbabwe):

- infrastructure
- technical equipment
- medication
- consumables/renewable resources

7 World Health Organization. Standards for improving quality of maternal and newborn care in health facilities. Geneva: World Health Organization; 2016.

8 World Health Organization. Standards for improving the quality of care for children and young adolescents in health facilities. Geneva: World Health Organization; 2018.

- organisation of services (clinical, client and community health services or essential newborn care services)
- management systems
- human resources
- infection prevention and control
- categories of care (e.g. routine care, standard inpatient care, KMC, high care in neonatal unit and NICU)
- continuum of care from preconception to community care
- supervision, education and training (including standards for information, education and communication)

Clinical guideline documents and protocols

Terminology such as (clinical) guidelines and protocols in the document titles do not appear to have been used consistently across documents. Some documents focused more on recommendations, whereas others also included specific care and procedural guidance. It was also not always very clear which level(s) of care some of the guideline documents targeted. The documents ranged from fairly simplified guidance for essential newborn care to very detailed documents with intensive care guidelines and protocols as well as theory. As many documents only focused on essential newborn care it was difficult to compare clinical and training documents, as they varied greatly between countries with regard to theory and up-to-date management information based on the most recent evidence. Not all the documents were scrutinised in detail, as the volume was too large. The fact that some documents were drafts with format, grammatical and spelling issues, further complicated the review. French and Portuguese documents in this ambit could not be analysed as translations were not available.

It is understandable that documents with basic information only were targeted for essential newborn care and were not focused on the high and intensive care levels of SSNs. There were two types of documents with detailed information: **clinical guides and training manuals**. The more comprehensive guidance and training documents contained a section on KMC. There were also KMC-specific documents or guidelines that did not include other SSN topics (Kenya, Uganda).

Malawi had a one-page poster as KMC protocol. Two KMC guideline documents were adaptations of the WHO 2003 KMC practical guide[9] (Lesotho, Zambia). We also received two versions of an Integrated Management of Newborn and Child Illnesses (IMNCI) (Uganda x2).

Comments on clinical guideline documents and protocols provided by countries were captured in an impressions table in Annexure C. Of the countries that provided clinical guides or training manuals in English the most comprehensive and up to date were those from Botswana, Eswatini, Ethiopia, Malawi (update needed), Rwanda, South Africa and Tanzania. One document also covers aspects of obstetrics, but the title refers to "neonatal" only (Eritrea). If documents are meant to be used as a pocket guide for the care of SSNs, the question is whether obstetric care should be covered in a separate document or whether the title of the document should include obstetrics and the pocket guide then has a wider use. Documents from other countries were more basic and had some out-dated sections or gaps in theory, standards or knowledge. More details are found in Annexure C.

Three specific care issues are highlighted for more attention: feeding of preterm and sick newborns; neonatal jaundice; and the use of the terminology neonatal encephalopathy and hypoxic-ischaemic encephalopathy.

Feeding of preterm and sick newborns

Many of the documents from the different countries lacked the full information and guidance on the feeding of preterm infants. Preterm infants are not always able to feed directly from the breast and need assistance with oral feeding by means of providing expressed breastmilk via a gastric tube or cup-feeding. Many guides mention these alternative methods of feeding but do not give a description of the process. Some countries have a separate document where the process of tube- and cup-feeding is explained. It is important that tube feeds should take place in the KMC position as the skin-to-skin position stimulates the release of important hormones from the pancreas that assists in good food absorption.[10]

9 World Health Organization. Kangaroo mother care: a practical guide. Geneva: World Health Organization; 2003.

10 Ludington-Hoe S. Evidence-based review of physiologic effects of kangaroo care. Current Women's Health Reviews. 2011; 7: 243-53. Törnhage CJ, Serenius F, Uvnäs-Moberg K, Lindberg T. Plasma somatostatin and cholecystokinin levels in preterm infants during kangaroo care with and without nasogastric tube-feeding. Journal of Pediatric Endocrinology & Metabolism. 1998; 11: 645-51.

Some guidelines explain the manual expression of breastmilk adequately. Others are not clear on how to show a mother how to express milk correctly. Preterm infants do not suckle very strongly and this is a poor stimulus for the production of breastmilk. Mothers with preterm infants therefore often have poor milk production or the production goes down after a time. Therefore, hand expression should be done correctly in order to stimulate the breast tissue to keep on producing enough breastmilk until the baby is strong and mature enough to suckle strongly from the breast.

The guidance on calculating the volume of feeds for preterm and newborn infants differs between the countries. Some of the protocols and feeding tools are very complex and sometimes confusing. Some country guidelines propose a very slow increase in oral feeds with the result that the preterm infant is kept on an intravenous (IV) line for much longer. The longer IV fluids are given to a baby, the higher the chance for the baby to develop serious sepsis. The current trend is to increase feed volumes as much as 30 ml/kg per day until peak volume of 160 to 180 ml/kg is reached.[11]

Mothers with preterm infants often have poor milk production, therefore, hand expression should be done correctly in order to stimulate the breast tissue to keep on producing enough breastmilk until the baby is strong and mature enough to suckle strongly from the breast.

11 Morgan J, Young L, McGuire W. Slow advancement of enteral feed volumes to prevent necrotising enterocolitis in very low birth weight infants. The Cochrane Database of Systematic Reviews. 2015: Cd001241. Kumar RK, Singhal A, Vaidya U, Banerjee S, Anwar F, Rao S. optimizing nutrition in preterm low birth weight infants - consensus summary. Frontiers in Nutrition. 2017; 4: 20. Kwok T, Dorling J and Ojha S. Multicentre prospective observational study of feeding practices in 30–33 weeks preterm infants. BMJ Paediatrics Open. 2017; 1: e000040. Nangia S, Bishnoi A, Goel A, Mandal P, Tiwari S, Saili A. early total enteral feeding in stable very low birth weight infants: a before and after study. Journal of Tropical Pediatrics. 2018; 64: 24-30.

This reduces the time span for giving IV fluids to the preterm and reduces infection rates in the neonatal unit. The 2017 WHO recommendations on newborn health state that **"in VLBW [very low birth weight] infants who need to be fed by an alternative oral feeding method or given intragastric tube feeds, feed volumes can be increased by up to 30 ml/kg per day with careful monitoring for feed intolerance"** (page 13).[12]

Some country guidelines indicate that preterm infants should be kept nil per os for the first 24 hours of life and that the infants only receive intravenous fluids. This practice is not recommended anymore. According to the 2017 WHO newborn health recommendations, **"VLBW infants should be given 10ml/kg per day of enteral feeds, preferably expressed breast milk, starting *from the first day of life*, with the remaining fluid requirement met by intravenous fluids" (our emphasis)** (page 13).[13] By starting enteral feeds from day one the infant will receive the benefit of colostrum from the mother, which is very important in protecting the infant against infections and the complication of necrotising enterocolitis (NEC).

Some country guidelines indicate that preterm infants should be kept nil per os for the first 24 hours of life and that the infants only receive intravenous fluids.
This practice is not recommended anymore.

Most guides advise 3-hourly feeds for the small babies, but mention that if a baby is unable to complete the feed volume, the baby should be fed more often. It is important to remember that it is not possible for a mother to keep feeding a baby 2-hourly if she has to do it for many days. She will get no rest or sleep. The most pragmatic way is to feed these babies 2-hourly during the day and 3-hourly at night. This relates to 10 feeds in 24 hours and usually the baby is able to cope with the volume of feeds and the mother can get rest at night. If the baby is still unable to complete the feed volume via cup, a gastric tube should be inserted to avoid poor weight gain or aspiration complications.

Most of the guides discuss in detail the benefits of breastfeeding and the management of complications such as too little breastmilk or breast engorgement. It is very important that the preterm infant is introduced to the breast as early as possible if one wants the baby to establish breastfeeding successfully. There should not be cut-off weights such as 1200 grams for when a baby should start feeding at the breast.

The best way to prepare a baby to suckle from the breast is to initiate non-nutritive suckling in the baby by letting the baby suck on the mother's little finger. Initially the baby will only lick and get to know the nipple without getting any milk from the breast. As babies matures and gain weight, they start drinking larger volumes of milk from the breast.

12 World Health Organization. WHO recommendations on newborn health: guidelines approved by the WHO Guidelines Review Committee (WHO/MCA/17.07). Geneva: World Health Organization, 2017.

13 World Health Organization. WHO recommendations on newborn health: guidelines approved by the WHO Guidelines Review Committee (WHO/MCA/17.07). Geneva: World Health Organization, 2017.

Very few of the guides mention the length of time that a baby should drink from the breast per feed to attain good weight gain. A term infant can easily manage to drink for 30 minutes from the breasts. However, a preterm infant does not have the co-ordination or the musculature to suckle for such a long time. To keep a baby too long on the breast will only tire baby and mother, and no-one will gain from such a practice. Initially preterm infants suckle for a few minutes at the breast only and that is why supplementary methods such as gastric tubes or cup feeding are used to ensure that the baby receives enough breastmilk at each feeding time.

The sequence of each feed should start with suckling at the breast first, followed by cup and/or tube. All these infants' feeds need to be calculated to establish the total volume of milk that the baby should receive per feed. The total feeding volume per day is calculated by multiplying 160ml-180ml with the infant's highest weight and this is then divided by 8 for 3-hourly feeds.

If babies are able to suckle but tire quickly, the 'top-up' volume of expressed breastmilk could be given via cup or tube. The smaller the baby, the higher the 'top-up' volume should be of the total calculated volume of human milk that a baby should receive. For example, a baby weighing 1200g may receive 90% of total calculated milk volume as a 'top-up', while a 2000g baby may receive 50%. As the preterm infant gains weight, with improved co-ordination and strength, the feeding time on the breast should increase.

The South African Newborn Care Charts booklet[14] is one of the guide documents that best covers the feeding aspect of SSNs. It also contains a whole chapter on the correct method to mix and prepare formula feeds. Few of the other documents have this information. Formula is mentioned where the mother does not have milk, but there is no guidance as to the volume or the method of preparation. The feeding of preterm and sick newborns is further highlighted as a topic in the Recommendations section.

14 http://www.kznhealth.gov.za/kinc/Newborn_care_charts_March_2014.pdf

Neonatal jaundice

Neonatal jaundice is one of the topics that is covered well in most of the countries' guidelines. The guides, however, differ as to when phototherapy should start and end. The South African Neonatal Care Charts booklet[15] has a very good chart with bilirubin values when phototherapy should be initiated and stopped and when exchange transfusion should be considered. This graph could help with uniformity of management in different countries, especially where laboratory blood tests are easily available. In countries where laboratory tests are not freely available, the diagnosis of jaundice is more uncertain and more errors could occur, as the diagnosis is often dependant on the health worker's experience.

Use of terminology: neonatal encephalopathy versus hypoxic-ischaemic encephalopathy (birth asphyxia)

According to a task force of the American College of Obstetricians and Gynecologists, neonatal encephalopathy (NE) is a heterogeneous, clinically defined syndrome characterized by disturbed neurologic function in the earliest days of life in an infant born at or beyond 35 weeks of gestation. It is manifested by a reduced level of consciousness or seizures, depression of tone and reflexes and is often accompanied by difficulty with initiating and maintaining respiration and by multiple organ involvement.[16]

Given that the underlying nature of brain injury causing neurologic impairment in a newborn is often poorly understood, "neonatal encephalopathy" has emerged as the preferred term to describe the clinical syndrome of central nervous system dysfunction in the newborn period because it does not imply a specific underlying aetiology or pathophysiology. Thus, a term such as hypoxic-ischaemic encephalopathy (HIE) should only be used if a clear sentinel event such as prolapsed cord or placental abruption occurred. Otherwise, it is preferable to use the term neonatal encephalopathy.[17]

Every Newborn Action Plan (ENAP) documents

The consultants received 14 documents related to countries' ENAP policies. Ten were ENAP policy documents (Angola, Comoros, Lesotho, Madagascar, Malawi, Mozambique, Namibia, Somalia, South Sudan, Zimbabwe) that ranged between 19 and 83 pages in length (average 41 pages). Madagascar's ENAP is integrated in its operational plan for the reduction of maternal and neonatal mortality. Other ENAP-related documents included a commitment document (Madagascar), two ENAP tools (Tanzania, Uganda) and a PowerPoint presentation on the ENAP bottleneck analysis (Zambia).

A superficial comparison between the documents showed that some were very much aligned to the format, structure and wording of the original 2014 ENAP documents, especially with regard to guiding principles and strategic objectives. The use of terms like strategies and actions vary between documents, with some more operationally oriented than others.

Strategic plans and similar documents

A total of 29 documents were received that were somehow related to strategic planning or frameworks. There were eight strategic planning documents with titles referring to maternal and newborn health:

- RMNCAH (Burundi, Rwanda)
- RMNCAHN (Namibia, South Sudan)
- SRMNCAHN (Angola, Eswatini, Lesotho)
- RMNCAHN + Healthy Aging (Eritrea)

Other documents related to RMNACH include a monitoring and evaluation (M&E) framework for RMNCAHN (Lesotho), a case for investment in RMNCAH (Madagascar), a closure report for an RMNCH project (Mozambique) and a law regarding Reproductive Health and Family Planning (Madagascar).

15 http://www.kznhealth.gov.za/kinc/Newborn_care_charts_March_2014.pdf

16 American College of Obstetricians and Gynecologists' Task Force on Neonatal Encephalopathy. Executive summary: Neonatal encephalopathy and neurologic outcome, second edition. Report of the American College of Obstetricians and Gynecologists' Task Force on Neonatal Encephalopathy. Obstetrics and Gynecology. 2014; 123: 896-901.

17 Molloy EJ, Bearer C. Neonatal encephalopathy versus hypoxic-ischemic encephalopathy. Pediatric Research. 2018; 84: 574. Dammann O, Ferriero D, Gressens P. Neonatal encephalopathy or hypoxic-ischemic encephalopathy? Appropriate terminology matters. Pediatric Research. 2011; 70: 1-2.

Other documents related to newborn health included five framework/package titles (Mozambique, Tanzania, Zambia x2, Zimbabwe) and four with a focus on newborn survival (Ethiopia, Madagascar, Mozambique, Zimbabwe). There were five documents related to quality frameworks, one quality improvement strategic plan (Tanzania), three national quality management documents (Malawi, Namibia x2) and one operational guide for improving quality in facility care for newborns (Tanzania). The remaining three documents covered topics such as a national health policy (Madagascar), a health sector transformation plan (Ethiopia) and plan for the elimination of mother-to-child transmission of HIV, syphilis and hepatitis B (Madagascar).

Other documents and tools

"Other documents" is a collection of miscellaneous documents. One document is a "handbook" for mothers with a section for her own care and one for child monitoring (Kenya). Some documents are very specific, such as a guideline for chlorhexidine use for cord care (Madagascar), a poster for Helping Babies Breathe (Angola), a sick child job aid (Uganda), the Respectful Maternity Care Charter (Malawi), a newborn study report (Kenya), a Flowchart of Integrated Care for Women in Childbirth (Mozambique), the Expanded Programme of Immunization (Madagascar), the Management of Sick or Underweight Children due for Vaccination (Namibia) and commitment to family planning) (Madagascar). There were two 12-year old reports named Essential Package of Health Services (Somalia) and then there were one health sector review report (Mozambique), a public health expenditure review (Namibia) and one national list of essential drugs and commodities (Madagascar).

Tools, checklists and forms that were submitted included two KMC tools (Uganda x2), two ENAP tools (Tanzania, Uganda), five MPDSR tools (Uganda x4, Zambia), two supervision checklists (Zambia x2), and five quality of care checklists and reporting forms (Malawi x5).

A few highlights from the ENAP database

An analysis of the 2019 ENAP database for the ESA countries revealed a number of gaps that are detailed in Annexure A. The following are a few observations on the organisation of maternal and newborn health at the national level:

- Five countries did not have a MoH focal person and three did not have a national technical working group (TWG) for maternal and newborn health (MNH).
- Meeting schedules for the TWGs differed between countries, with quarterly meetings being the most popular schedule (11 countries), followed by monthly meetings in four countries. One country had one meeting per year; in another the TWG met twice per year. In one country, MNH was represented in two TWGs, one meeting monthly and one meeting quarterly.
- Four countries did not manage to keep to their schedule of meetings.
- The nature of the TWGs had even more variation. One country had a TWG for newborn health only and three for maternal and newborn health only. Seven countries had a TWG with SRMNCAH combined and seven had other variations, with two of these countries having two relevant TWGs and two countries with four relevant TWGs.

Seventeen countries indicated that they had a national newborn action plan; two had a plan in progress and two had no plan. Of these countries, 15 had a costed plan and 13 plans had been budgeted. About half of the countries had national quality improvement guidelines for maternal and newborn health, national implementation standards of quality improvement and a plan to implement the quality of care guidelines and standards (n=9 to11).

All 21 countries had a target for their neonatal mortality rates (see Table 2), which ranged between 7 and 33 per 1000 live births. However, the year for achieving the target ranged between 2020 and 2035. Twelve countries set a target for between 2020 and 2025, with four countries setting a target of 12 per 1000 live births for 2030 and one country had a target of 7 for 2035.

Table 2. Neonatal mortality country targets

Country	Target*	Year
Namibia	7	2035
South Africa	10	2021
Uganda	10	2020
Ethiopia	11	2020
Angola	12	2025
Botswana	12	2030
Burundi	12	2030
Comoros	12	2030
Kenya	12	2030
Madagascar	12	2023
Zambia	12	2021
Eswatini	13	2023
Eritrea	14	2021
Rwanda	15	2024
Tanzania	16	2020
Mozambique	19	2022
Zimbabwe	20	2020
Malawi	23	2020
Lesotho	25	2023
Somalia	30	2023
South Sudan	33	2023

* Deaths per 1000 live births

With regard to other guidelines, 7 countries had an updated national KMC policy/guideline, 12 countries had such updated policy/guidelines for postnatal care, and 10 had a strategy for the care of SSNs. Thirteen countries had a perinatal death review system in place. Responses with regard to a selection of HMIS indicators in the ESA countries revealed that more than 80% had an indicator for maternal mortality (n=19), stillbirths (n=18), immediate initiation of breastfeeding (n=17), and low birth weight (n=20) in their health management information system (HMIS). Between 67% and 76% of countries had indicators on newborns with a documented birth weight (n=15), on preterm birth (n=16) and for pre-discharge neonatal mortality rate (n=14). Around 50% of countries had indicators for the performance of newborn resuscitation (n=10), the treatment of neonatal sepsis (n=10) and newborn deaths by cause (n=12). Indicators for the following were available in less than 35% of countries: newborns that benefited from KMC (n=7); perinatal death reviews (n=6); content of pre-discharge postnatal care (n=8); birth registration (n=3); and neonatal death registration with civil registrar (n=1).

For five interventions, we calculated the percentage of health facilities that provided the planned-for intervention (see Table 3). Only 17% of facilities targeted for KMC implemented the intervention. Resuscitation and SSN units fell in the 50-70% category and possible serious bacterial infection (PSBI) and postnatal care in the 70-90% category.

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Table 3. **Percentage of facilities that implemented five planned interventions across ESA countries**

	FACILITIES			COUNTRIES
INTERVENTION	Planned for intervention (n)	Intervention was provided (n)	Planned & providing intervention (%)	Zero provision of intervention for planned facilities (n)
Resuscitation	23628	15328	65%	1
KMC	4843	833	17%	2
PSBI	30286	21363	71%	5
Postnatal care	23630	20426	86%	1
SSN units	1284	687	54%	2

Limitations

As is clear from the report, this exercise had many limitations, which can be summarised as follows:

- The vast number of documents submitted, some very relevant and others with little to no relevant information, hampered an in-depth comparison focusing only on a small number of documents. It was not possible to give detailed attention to every document.
- Countries provided different numbers and types of documents and important documents from some countries may have been missed.
- Many documents were in draft format and some did not have a publication date.
- French and Portuguese documents were not analysed in detail because of language limitations of the consultants.
- The documents do not say anything about what is really happening on the ground.
- The consultants are not well informed about the levels of care in each country and what is possible in each context.

Recommendations

It is acknowledged that some of the recommendations may not be appropriate or feasible, as the consultants are not familiar with the way in which UNICEF deals with country documents.

Document storage

UNICEF ESAR could consider adopting a more systematic approach in the storage of country documents. It could have the format of an 'archive' that would make it easier to find relevant documents according to specific topics or in the format of a framework on the types of documents that should be available in countries to improve the care of neonates and children, especially the SSNs. This could also help with identifying gaps in the types of guidelines that have been developed. Such an archive would also enable new country office personnel to familiarise themselves more easily with existing country documents, The country that came the nearest to this proposal was Madagascar, which provided a more comprehensive list of documents that were available (see Annexure D). This mapping exercise highlighted, on the one hand, the necessity of getting a sense of the more comprehensive document landscape in the region, but on the other hand also the importance of being selective in the types of documents requested for analysis across the region in future.

From policy to practice at grassroots

Having guideline documents does not necessarily mean they are implemented in practice. It is common knowledge that many policy-related documents attract the proverbial dust on the shelves. Government at the higher levels of the health system are responsible for developing policy and driving national guideline development. The mapping of the documents enabled us to identify some of the information gaps in specific documents, although they might have been addressed in documents that we had not received. What this mapping exercise was not able to evaluate was how well the guidelines and procedures described in the documents were actually operationalised in practice. Some documents received were, for example, quite detailed training manuals. No information is available on how wide the training had been conducted and who received training. We are also aware of the so-called 'dilution effect' as information is cascaded down to grassroots that is often associated with a training-the-trainers model.

In some countries clinical leadership may be situated in the teaching hospitals of the country and there may be some trickle-down effect, albeit different in different contexts. In other contexts the stronger initiative may come from the government's side with a more standardised approach. Getting some sense of the gaps in clinical leadership and the collaboration models between clinicians and government officials could lead to discussion and reflection on how to enhance the pool of clinical leadership and governance skills in a country. It could also help to find a balance between aspirations and reality.

In order to get more systematic information on the implementation gaps in the care of SSNs in the countries in the region UNICEF could, for example, consider conducting different kinds of short surveys

- to map existing documents more systematically, to report on how clinical leadership is organised in the country and how national guidelines are implemented. The challenge would be 'asking the right people' to get 'to the bottom' of implementation issues.
- to plot existing practices in hospitals with neonatal units in a country or in the hospitals that fall within the UNICEF areas of support against the guidelines included in the documents.

The results of such surveys may enable UNICEF to give more guidance to country offices on important SSN focus areas and how to be more efficient.

A focus on the feeding of small and sick newborns

The most important food for any baby is the mother's own milk. However, small and sick newborns are often too weak or uncoordinated to suckle milk from the mother's breast and therefore they have to receive human milk via other methods as well.

Successful breastfeeding after a few weeks is possible in SSNs, but health care workers need the knowledge and skills to teach and support the mother to attain this goal. Getting a small baby to suckle from the breast takes patience and encouragement.

UNICEF ESAR could consider a learning programme focusing on the feeding of SSNs (as one of the topics to launch through learning networks) and that will include neglected aspects such as the importance of non-nutritive sucking, getting the balance right between feeding at the breast and breast milk 'top-up' feeding via cup or gastric tube, and the oral stimulation of babies with feeding difficulties. In previous studies on KMC implementation appropriate feeding of SSNs was found to be one of the biggest challenges. It is important to align any efforts in this area with work done by other projects or agencies in ESA countries that go beyond breastfeeding orientation for healthy term newborns.

All the aspects of the feeding of SSNs should be explained in detail in clinical protocols or guidelines. Providing job aids to health care staff to demonstrate correct feeding techniques or to simplify the calculation of feeds for each individual baby could be helpful.

ENAP: Progress with implementation targets of interventions

Some ENAP documents have detailed implementation frameworks with target dates. There may be a mechanism by which UNICEF collects information of how well countries managed to keep to their targets for implementing actions or interventions, of which the consultants are not aware. These actions are mostly not included in indicators that measure impact. Having a better sense of how well ENAP interventions are implemented across the ESA countries by means of a self-evaluation exercise may make for an interesting comparison. Systematic in-country reflection on own progress may also contribute to a renewed impetus to continue working towards the goals and strategic objectives set for each country.

Nurturing learning from each other: In-country and across countries

An ideal outcome of this mapping exercise would be the sharing of documents in-country and across countries. We are not aware which documents are official and open for sharing and which ones not. Documents that are open for sharing and available on the internet (such as the South African Newborn Care Charts) could be distributed more widely. The necessary permission for sharing should be obtained from country authorities when in doubt.

Countries should be encouraged to engage with the WHO standards for SSNs and link them with existing quality improvement initiatives in the country. The standards could, for example, be used as a checklist at hospital and district level to identify gaps and how one could embark on improvements within the system, identifying what could be accomplished within the current resource allocations and for what kind of additional resources there should be special advocacy or lobbying activities.

The SSN standards could also be used as a vehicle to create in-country and across-country learning networks that go beyond webinars organised through the region. Smaller learning groups with a manageable number of participants that can interact more actively in a discussion could be organised for continuing professional development accreditation. Leadership for this should come from the medical and nursing/midwifery professions. More interactive discussions between colleagues working at the same level of care in one country or across countries could stimulate initiatives and peer learning, also with regard to clinical leadership and governance. Specific topics, treatments and procedures, especially where there is controversy, could also be covered through a learning network, with input from WHO and UNICEF specialists and others. This would, for example, be very important if the WHO issues a revised set of newborn care guidelines with big changes. One recent finding that has stirred a lot of conversation and speculation on what may possibly change is the publication of study results on immediate skin-to-skin care for unstable babies.[18] Should this become a recommendation, much training, coaching and mentoring will be needed to ensure safe practice.

18 WHO Immediate KMC Study Group. Immediate "Kangaroo Mother Care" and Survival of Infants with Low Birth Weight. New England Journal of Medicine. 2021;384(21):2028-38.

Other learning activities to consider are the inclusion of KMC in quality improvement programmes in health facilities and other levels of the health system and using the information in the impressions table (Annexure C) as a checklist to scrutinise own documents and to discuss how policies, guidelines and practices could be improved. Individuals and countries could also be encouraged to join and participate in existing networks and platforms that organise regular webinars and provide links to resources on topics of interest and importance such as the Small and Sick Newborn Community of Practice,[19] the Quality of Care network[20] and AlignMNH.[21] The World Continuing Education Alliance (WCEA)[22] is a platform associated with professional bodies in a number of ESA countries and is also an avenue to explore for upskilling health workers, especially nurses and midwives.

Keeping updated through consulting reliable resources

One of the deliverables for this assignment was to compile a compendium of resources on the care of small and sick newborns. Currently many existing resources have a section on the care of SSNs. It is almost impossible to provide a comprehensive annotated list of all reliable resources. It is not only overwhelming, but at the pace at which new knowledge is generated, constant updates are needed and it is an art to evaluate the quality of website information.

As alternative we drafted a short list of reliable websites from which information could be sourced (Annexure E). This table also includes handbooks that are free to download and which could be useful for use or adaptation in countries that do not have their own manuals. As knowledge is continuously expanding and changing it is important that health care workers, managers and programme officials keep abreast of new developments that can have an impact on their knowledge and skills. Country offices could consider working through these links systematically and assist with creating in-country learning opportunities for health care providers to enhance their knowledge and skills and to enable them to find good information. The newly launched NEST360°newborn care toolkit is a website that should also be consulted for guidance.[23]

It is also recommended that countries keep up to date with small and sick newborn care guidelines and other relevant statements issued by reliable professional networks such as the American and European Academies of Paediatrics. Country offices could encourage in-country professional associations to endorse such statements pertaining to the care of sick and small newborns. For example, with regard to KMC there have been a number of position statements that country professional association endorsed after the initial publication.[24]

On the choice of terminology for document titles

We encountered a number of terms in the documents that were included in the database. It is not clear if all programme officials and health professionals have the same understanding on the use of terminology.

Here are some of the terms to unpack: **policy, standard, (clinical) guide(line), pocket guide, protocol, procedure, standard operating procedures (SOPs)**. Other terms that are used in general communications (not specific to our analysis) are: **workshop vs. training; and supervision vs. mentoring and coaching**.

It is recommended that individuals and groups reflect on their use of these terms to ensure there is a common understanding. Below is a description of how the terms policy, standard, protocol, procedure and guideline are understood in practice.

19 https://ibpnetwork.org/topics/14356/feed

20 https://www.qualityofcarenetwork.org/home

21 https://alignmnh.org/

22 https://wcea.education/

23 https://www.newborntoolkit.org/

24 International Policy Statement for Universal Use of Kangaroo Mother Care for Preterm and Low Birthweight Infants. Commitment to Action from Professional Health Associations. 2016. https://www.healthynewbornnetwork.org/resource/kmcjointstatement/ The Council of International Neonatal Nurses Position Statement on Kangaroo Mother Care. Last review 2018. https://www.coinnurses.org/position-statements Engmann C, Wall S, Darmstadt G, Valsangkar B, Claeson M, on behalf of the participants of the Istanbul KMC Acceleration Meeting. Consensus on kangaroo mother care acceleration. Lancet. 2013;382:e26–e7.

Hewitt-Taylor distinguishes between clinical guidelines and care protocols as follows:

"Although the terms clinical guideline and care protocol are often used interchangeably ... there is an important distinction ... A guideline is defined as a principle or criterion guiding or directing action ..., a protocol is defined as a rule relating to a procedure... This suggests that a protocol dictates actions which must be adhered to, whereas guidelines offer less rigid advice. Care protocols, thus have the potential to be less flexible to individual need and to give less scope for professionals to use their professional judgement than clinical guidelines." (p 49)[25]

The International Federation of Ageing gives the following definitions related to diabetes that could also be transferred to the care of SSNs:

*"**Guidelines** are sets of evidence-based recommendations that aid decision-making about care in specific health systems and resource settings. ...*

***Protocols** are agreed frameworks outlining the care that will be provided to patients in a designated area of practice ... They do not describe how a procedure is performed but why, where, when and by whom the care is given.*

The development, uptake and ongoing utilization of guidelines and protocols enable improved consistency in clinical care and therefore equal access to evidence-based care for people with [a specific condition]."[26]

The American Academy of Pediatrics describes a standard as follows in relation to other terms:

*"**A Standard** is criteria set for a certain task... It differs from a recommendation or a guideline in that it carries great incentive for universal compliance. It differs from a regulation in that compliance is not necessarily required for legal operation. It usually is legitimized or validated based on scientific or epidemiological data, or when this evidence is lacking, it represents the widely agreed upon, state-of-the-art, high-quality level of practice."*[27]

Figure 1 on the next page is a summary of how the terminology is normally interpreted, even beyond health care. The sources are provided in Annexure F.

Conclusion

This review confirms anecdotal reports that information related to the care of small and sick newborns are distributed across many different official documents in most countries and that it is not always easy to find relevant information when needed. In terms of the way forward, the recommendations above could be considered. Of particular interest is answering the question to what extent guidelines are operationalised in practice at the different levels of the health care system.

25 Hewitt-Taylor J. Clinical guidelines and care protocols. Intensive Critical Care Nursing. 2004;20(1):45-52.

26 International Federation of Ageing. Guidelines and Protocols. https://drbarometer.com/communities-of-practice/guidelines-and-protocols

27 American Academy of Pediatrics. Definitions Explained: Standards, Recommendations, Guidelines, and Regulations. In: American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in Child Care and Early Education Caring for Our Children. National Health and Safety Performance Standards: Guidelines for Early Care and Early Education Programs (3rd ed). 2017. https://ebooks.aappublications.org/content/caring-for-our-children-3rd-edition

Figure 1. Graphic depiction of different terminologies

Annexure A: Summary of selected information obtained from the 2019 ENAP ESA database

Organisational gaps

Gap	Countries
No national MOH newborn focal point/person (23.8%)	Angola, Burundi, Eritrea, Somalia, South Sudan
No subnational MOH newborn focal point/person (33.3%)	Mozambique, Namibia, Zambia, Angola, Eritrea, Somalia, South Sudan
No national technical working group for maternal and newborn health (14%)	Comoros (in process), Eritrea, Namibia
No representation of civil society in national TWGs (23.8%)	Botswana, Mozambique, Somalia, South Africa, South Sudan

Meeting schedules of technical working groups (TWGs)

Schedule	No. of countries	Countries meeting according to schedule	Countries with fewer meetings than schedule	No. of meetings held
Annual (1 meeting)	1	Tanzania		
Twice per year (2 meetings)	1		Eswatini	1
Quarterly (4 meetings)	11	Burundi, Ethiopia, Kenya, Lesotho, Malawi South Africa, South Sudan	Angola, Somalia, Zambia Zimbabwe	1 2
Monthly (10-12 meetings)	4	Botswana, Madagascar, Mozambique, Uganda		
Other (monthly & quarterly)	1	Rwanda (Sub-technical WG monthly and overall RMNCAH TWG is quarterly)		
No TWG	3			

Composition of technical working groups attending to maternal and newborn health

Type of technical working group	No.	Country names
No TWG	3	Comoros (in process), Eritrea, Namibia
Newborn health only	1	Zambia
Maternal & newborn health only	3	Botswana, Burundi, South Africa
SRMNCAH combined	7	Angola, Lesotho, Malawi, South Sudan, Uganda, Tanzania, Zimbabwe
Other	7	
Child & Newborn Health TWG		Mozambique
Interagency Technical Coordinating Committee for SRH		Eswatini
Reproductive Health TWG		Somalia
Two TWGs: maternal; newborn and child health		Ethiopia
Two TWGs: MNH working group; Separate newborn health working group		Kenya
Four TWGS and Committees: MNH national committee; RMNCAH-N technical working group; MPDSR Committee; H6+		Madagascar
Four separate TWGs: Safe Motherhood TWG; Neonatal TWG; Child health TWG; RMNCAH TWG		Rwanda

* MNH = Maternal and Newborn Health; TWG = Technical Working Group; SRH = Sexual and Reproductive Health; SRMNCAH = Sexual Reproductive Maternal Newborn Child and Adolescent Health; RMNCAH-N = Reproductive Maternal Newborn Child Adolescent Health and Nutrition

National target for neonatal mortality rates

Year	No. of countries	Target per 1000 live births per country										Range
2020	5	Uganda	10	Ethiopia	11	Tanzania	16	Zimbabwe	20	Malawi	23	10 – 23
2021	3	South Africa	10	Zambia	12	Eritrea	14					10 – 14
2022	1	Mozambique	19									19
2023	5	Madagascar	12	Swaziland	13	Lesotho	25	Somalia	30	South Sudan	33	12 – 33
2024	1	Rwanda	15									15
2025	1	Angola	12									12
2030	4	Botswana	12	Burundi	12	Comoros	12	Kenya	12			12
2035	1	Namibia	7									7

Country targets

Country	Target*	Year
Namibia	7	2035
South Africa	10	2021
Uganda	10	2020
Ethiopia	11	2020
Angola	12	2025
Botswana	12	2030
Burundi	12	2030
Comoros	12	2030
Kenya	12	2030
Madagascar	12	2023
Zambia	12	2021

Country	Target*	Year
Eswatini	13	2023
Eritrea	14	2021
Rwanda	15	2024
Tanzania	16	2020
Mozambique	19	2022
Zimbabwe	20	2020
Malawi	23	2020
Lesotho	25	2023
Somalia	30	2023
South Sudan	33	2023

* Deaths per 1000 live births

Relationship between planned interventions and actual provision at facility level

	Resuscitation			Kangaroo Mother Care			Pos. Serious Bact. Inf. (PSBI)			Postnatal Care			Small & Sick Newborn Units		
ESAR countries	Planned	Providing	% planned provided	Planned	Providing	% planned provided	Planned	Providing	% planned provided	Planned	Providing	% planned provided	Planned	Providing	% planned provided
Angola	819	22	3%	819	1	0%	162	22	14%	819	819	100%	140	5	4%
Botswana	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burundi	1173	124	11%	850	27	3%	198	0	0%	850	842	99%	46	44	96%
Comoros	52	30	58%	3	2	67%	3	3	100%	52	52	100%	3	3	100%
Eritrea	237	228	96%	237	0	0%	237	228	96%	237	228	96%	24	1	4%
Swaziland	16	16	100%	16	1	6%	16	0	0%	16	16	100%	2	6	300%
Ethiopia	3896	3173	81%	195	195	100%	20840	18440	88%	3896	3896	100%	166	86	52%
Kenya	-	-	-	470	100	21%	-	-	-	-	-	-	0	150	0 planned
Lesotho	216	47	22%	20	2	10%	45	0	0%	216	132	61%	21	21	100%
Madagascar	2365	600	25%	1200	60	5%	2365	200	8%	2546	2546	100%	113	45	40%
Malawi	633	633	100%	0	78	0 planned	0	183	0 planned	633	633	100%	27	27	100%
Mozambique	1429	801	56%	-	-	-	1527	0	0%	1436	1436	100%	59	53	90%
Namibia	35	35	100%	35	5	14%	385	198	51%	35	35	100%	35	34	97%
Rwanda	556	556	100%	46	46	100%	46	46	100%	556	556	100%	42	42	100%

	Resuscitation			Kangaroo Mother Care			Pos. Serious Bact. Inf. (PSBI)			Postnatal Care			Small & Sick Newborn Units		
ESAR countries	**Planned**	**Providing**	**% planned provided**	**Planned**	**Providing**	**% planned provided**	**Planned**	**Providing**	**% planned provided**	**Planned**	**Providing**	**% planned provided**	**Planned**	**Providing**	**% planned provided**
Somalia	103	0	0%	50	0	0%	103	0	0%	103	0	0%	55	0	0%
South Africa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Sudan	33	14	42%	33	14	42%	321	50	16%	170	91	54%	27	0	0%
Uganda	1968	1968	100%	385	150	39%	1968	0	0%	1968	1968	100%	163	62	38%
Tanzania	6488	3500	54%	280	79	28%	92	21	23%	6488	3567	55%	160	83	52%
Zambia	1978	1950	99%	139	8	6%	1978	1972	100%	1978	1978	100%	139	12	9%
Zimbabwe	1631	1631	100%	65	65	100%	-	-	xxx	1631	1631	100%	62	13	21%
Total	23628	15328	65%	4843	833	17%	30286	21363	71%	23630	20426	86%	1284	687	54%
Mean	1313	852		269	46		1782	1257		1313	1135		68	36	
Median	726	392		102	21		198	22		726	726		46	27	
Min	16	0		0	0		0	0		16	0		0	0	
Max	6488	3500		1200	195		20840	18440		6488	3896		166	150	
No info	3	3		3	3		4	4		3	3		2	2	
Countries info	18	18		18	18		17	17		18	18		19	19	
Response rate	85.7%			85.7%			81.0%			85.7%			90.5%		
Cannot make calculation	0	0	0	0	0	1	0	0	2	0	0	0	0	0	1

Responses to a selected number of items in the ENAP database

Eastern and Southern Africa Region (ESARO)	**Yes**		**No**		**In process**		**No response**		**Total**	**Response rate**
	n	%	n	%	n	%	n	%	n	%
NEWBORN HEALTH AT THE NATIONAL LEVEL										
Ministry of Health focal point for newborn health at national level	16	76%	5	24%	0	0%	0	0%	21	100%
Ministry of Health focal point for newborn health at sub-national level	14	67%	7	33%	0	0%	0	0%	21	100%
Is there representation from civil society, women's groups, or parents advocacy groups in the national technical working group?	13	62%	5	24%	0	0%	3	14%	18	86%
NATIONAL NEWBORN ACTION PLAN										
NNAP	17	81%	2	10%	2	10%	0	0%	21	100%
NNAP integrated with a Reproductive and Maternal Health National Plan?	18	86%	3	14%	0	0%	0	0%	21	100%
Adequately strengthened RMNCAH strategy/plan for implementation at scale with focus on MNH	13	62%	1	5%	7	33%	0	0%	21	100%
National plan formulated in coordination with other sectors	19	90%	2	10%	0	0%	0	0%	21	100%

Eastern and Southern Africa Region (ESARO)	Yes		No		In process		No response		Total	Response rate
	n	%	n	%	n	%	n	%	n	%
Civil society, women's groups, and/or parents advocacy groups input into the national newborn plan	16	76%	5	24%	0	0%	0	0%	21	100%
National Plans have a national target for newborn mortality rate	21	100%	0	0%	0	0%	0	0%	21	100%
National plan been costed	15	71%	6	29%	0	0%	0	0%	21	100%
National plan has been budgeted (current years)	13	62%	8	38%	0	0%	0	0%	21	100%
Does the country have sub-national newborn action plan/s ?	8	38%	13	62%	0	0%	0	0%	21	100%
Have the sub-national newborn action plans been costed?	8	38%	2	10%	0	0%	11	52%	10	48%
Have the sub-national newborn action plans been budgeted?	7	33%	3	14%	0	0%	11	52%	10	48%
Has implementation of the national and/or sub-national plans started/been initiated?	14	67%	2	10%	5	24%	0	0%	21	100%
QUALITY OF CARE										
Does your country have National Quality Improvement Guidelines for maternal and newborn health?	10	48%	7	33%	3	14%	1	5%	20	95%
Does your country have national implementation standards/ guidelines for quality improvement?	9	43%	1	5%	0	0%	11	52%	10	48%
Plan to implement the Quality of Care guidelines and standards?	11	52%	5	24%	4	19%	1	5%	20	95%
SMALL AND SICK NEWBRONS, KMC & PERINATAL DEATH REVIEW										
An updated national policy/guideline on Kangaroo Mother Care?	7	**33%**	8	38%	5	24%	1	5%	20	95%
Does your country have an updated national policy/guideline on postnatal care?	12	57%	6	29%	2	10%	1	5%	20	95%
Does your country have a national guideline or strategy for care of small & sick newborns?	10	48%	6	29%	4	19%	1	5%	20	95%
Does your country have a perinatal death review system in place?	13	62%	3	14%	4	19%	1	5%	20	95%
Does the review process include community level stakeholders?	6	29%	6	29%	1	5%	8	38%	13	62%
HEALTH MANAGEMENT INFORMATION SYSTEM										
Indicator for newborn resuscitation performed	10	48%	9	43%	1	5%	1	5%	20	95%
Indicator for newborns that benefited from KMC	7	**33%**	10	48%	3	14%	1	5%	20	95%
Indicator for treatment of neonatal sepsis	10	48%	9	43%	1	5%	1	5%	20	95%
Indicator on newborns with documented birth weight	15	71%	3	14%	1	5%	2	10%	19	90%
Indicator for pre-discharge neonatal mortality rate	14	67%	5	24%	1	5%	1	5%	20	95%
Indicator for maternal mortality	19	90%	0	0%	0	0%	2	10%	19	90%
Indicator for stillbirths	18	86%	2	10%	0	0%	1	5%	20	95%
Indicator for newborn deaths by cause	12	57%	5	24%	3	14%	1	5%	20	95%
Indicator for immediate/early initiation of breastfeeding	17	81%	3	14%	0	0%	1	5%	20	95%

Eastern and Southern Africa Region (ESARO)	Yes		No		In process		No response		Total	Response rate
	n	%	n	%	n	%	n	%	n	%
Indicator for low birthweight	20	95%	0	0%	0	0%	1	5%	20	95%
Indicator for preterm birth	16	76%	3	14%	1	5%	1	5%	20	95%
Indicator for content of pre-discharge postnatal care	8	38%	11	52%	1	5\%	1	5%	20	95%
Indicator for birth registration	3	14%	13	62%	4	19%	1	5%	20	95%
Indicator for neonatal death registration with Civil registrar	1	5%	15	71%	4	19%	1	5%	20	95%
Indicator for perinatal death reviews	6	**29%**	13	62%	1	5%	1	5%	20	95%
System in place to review the quality of HMIS data	14	67%	3	14%	3	14%	1	5%	20	95%

Annexure B: Summary of types of documents received

TYPE OF DOCUMENT	FOCUS /TOPIC	#	COUNTRY
1. Assessment reports and situation analyses (n=21)	Health programmes and services (maternal and newborn, EmONC)	5	Eswatini, Madagascar (x2), Uganda, Zambia
	Functionality (newborn corners, NICUs, health facilities)	3	Ethiopia (x2), Kenya
	Quality of care	2	Uganda, Lesotho
	Research (newborn study)	1	Kenya
	SARA	4	Eswatini, Madagascar, Mozambique, Somalia
	Bottleneck analysis (ENAP)	1	Zambia
	Indicators (DHS & MICS)	5	Ethiopia (x2), Mozambique, Tanzania, Zambia
2. Strategic planning documents (n=29)	RMNCAH (strategic plan)	8	Angola, Burundi, Eritrea, Eswatini, Lesotho (x2), Madagascar (x2), Mozambique, Namibia, Rwanda, South Sudan
	Other RMNCAH titles	4	Lesotho, Madagascar (x2), Mozambique
	Newborn health frameworks	5	Mozambique, Tanzania, Zambia (x2), Zimbabwe
	Newborn survival	4	Ethiopia, Madagascar, Mozambique, Zimbabwe
	Quality improvement	5	Malawi, Namibia (x2), Tanzania (x2)
	General policies and plans	3	Ethiopia, Madagascar (x2)
3. Country ENAP documents and tools (n=14)	ENAP policy documents	10	Angola, Comoros, Lesotho, Madagascar, Malawi. Mozambique, Namibia, Somalia, South Sudan, Zimbabwe
	Commitment document	1	Madagascar
	ENAP tool	2	Tanzania, Uganda
	Bottleneck analysis	1	Zambia
4. Quality of care (n=17)	Policies, plans and operational guides	4	Malawi, Namibia, Tanzania (x2)
	Norms and standards	4	Kenya, Malawi, Mozambique, Uganda
	Assessment	3	Eswatini, Lesotho, Uganda
	Checklists and other tools	6	Ethiopia, Malawi (x4), Mozambique
5. Standards documents (n=12)	RMNCAH	3	Burundi, Madagascar, Uganda
	Maternal and newborn care	3	Kenya, Mozambique, Zimbabwe
	Neonatal care	2	Rwanda, South Africa

TYPE OF DOCUMENT	FOCUS /TOPIC	#	COUNTRY
	Obstetric care	1	Rwanda
	Care of children and adolescents	1	Malawi
	Services	2	Uganda, Zambia
6. Guideline documents (n=29)	Maternal and newborn	2	Eritrea, Zimbabwe
	Newborn	10	Angola, Botswana, Comoros, Eritrea, Lesotho, Mozambique, Namibia, Rwanda, Tanzania, Zimbabwe
	Small and sick newborns	3	Ethiopia, South Africa, Uganda
	KMC	4	Kenya, Lesotho, Uganda, Zambia
	Postnatal	2	Angola, Zimbabwe
	Other (including antenatal and intrapartum care, EmONC, care for children, MPDSR, Essential medicines list)	9	Angola (x5), Malawi, Uganda, Rwanda, Tanzania
7. Management of newborns and other protocols (n=10)	Maternal and newborn or newborn	3	Eritrea, Kenya, Uganda
	Small and sick newborns	2	South Africa, Tanzania
	KMC	2	Malawi, Zambia
	Paediatrics under 5	1	Kenya
	Other (obstetrics, infection)	2	Malawi, Rwanda
8. Training materials (n=17)	Newborn care	1	Malawi
	Small and sick newborns	5	Ethiopia, South Africa (x4)
	EmONC	5	Madagascar (x2), Rwanda (x3)
	Helping Babies Breathe	2	Uganda (x2)
	Other (MPDSR, village health teams)	2	Madagascar, Uganda
	Facilitators' manuals	9	Kenya, Madagascar (x2), Rwanda, South Africa (x3), Uganda (x2)
	Participants' manuals	7	Ethiopia, Kenya, Madagascar, Malawi, Rwanda, South Africa, Uganda
9. MPDSR documents (n=13)	Guides and plans	6	Madagascar (x2), Malawi, Mozambique, Uganda (x2)
	Training manual	1	Madagascar
	Tools (forms)	5	Uganda (x4), Zimbabwe
	Commitment (decree)	1	Madagascar

TYPE OF DOCUMENT	FOCUS /TOPIC	#	COUNTRY
10. Miscellaneous tools, checklists and reporting forms (n=16)	KMC	2	Uganda (x2_
	ENAP	2	Tanzania, Uganda
	MPDSR forms	5	Uganda (x4), Zambia
	Supervision checklists	2	Zambia (x2)
	Quality of care checklists and forms	5	Malawi (x5)
11. Other (n=15)	Care	7	Angola, Madagascar (x3), Malawi, Mozambique, Namibia
	Packages	2	Somalia (x2)
	Research	1	Kenya
	Handbook for mothers	1	Kenya
	Job aid	1	Uganda
	Health sector and other general documents	3	Madagascar, Mozambique, Namibia

EmONC = emergency obstetric and newborn care; KMC = kangaroo mother care; RMNCAH = Reproductive, Maternal, Newborn, Child and Adolescent Health

Annexure C: Summary of impressions of the quality of documents related to newborn guidelines / protocols

Document numbers refer to the number allocated to a document in the Excel tracking document.

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
1	**Angola**	Documents in Portuguese. Not evaluated.				
2	**Botswana**	(1b) Neonatal Operational and Clinical Guidelines (FINAL)	• Some of the newborn care guidelines are up to date and complete included in this document. • Jaundice is well covered with the South African Billi graphs included.	• Comprehensive suggestions on aspects to add or expand on in the document have been submitted separately.		
3	**Burundi**	Documents in French. Not evaluated.				
4	**Comoros**	Documents in French. Not evaluated.				
5	**Eritrea**	(3) ENC: Clinical. Practice Pocket Guide	• In draft format document is still a bit chaotic. • In most parts too much information for a pocket book.	• Add a short pharmacopeia at the end with common medications and dosages. • Polio is not mentioned in the immunisation schedule at birth.	• Some of the algorithms and information contain outdated practices.	• Suggestions and comments made on the document and discussed with UNICEF. • Still needs a lot of work.
		(4) Eritrean National Clinical Protocol for Safe Motherhood and New Born Care 2018	• Resuscitation with algorithm well covered. • Bubble C-PAP explained. • Breastfeeding very well covered. • Polio is mentioned as part of immunisation schedule at birth. • Management of HIV exposed infants, breastfeeding and therapy is well covered. • Danger signs well covered. • KMC is covered.	• Feeding volumes and methods could be more extensive with better examples and how to calculate the volumes. • Management of hypoglycaemia could be more comprehensive. • Management of convulsions fairly basic. • Management of jaundice basic. • Intravenous fluid management is very basic and could be discussed in more detail.	• Contradictory advice regarding breastfeeding and HIV diagnosis: o "Women newly diagnosed with HIV during labour should be advised not to breastfeed" (p 67). o "High risk HIV infected women should continue with breastfeeding but baby should receive dual therapy and Nevirapine for 12 weeks" (p 70). • Discrepancy in the document between different sections discussing umbilical cord care: o Postnatal care (p 61): use of chlorhexidine application on the umbilical stump advised. o Newborn care (p 69): advice of not applying anything to the cord.	

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
6	**Eswatini**	(1) Neonatal Care Clinical Guidelines 2018	• Most topics very well covered. • A very comprehensive guideline of neonatal conditions.	• Feeding of small and sick newborns: o p 28: not clear why premature baby (> 30 weeks) should be fed with a syringe and small for gestational age baby with a cup (p 30: cup feeding on discharge). o Method of cup feeding not explained. o Chapter discussing breastfeeding could also be more comprehensive.		
7	**Ethiopia**	(8) Neonatal Clinical Guideline for Level III NICU in Ethiopia	• The most comprehensive guideline on sick and small newborn infants. • Comprehensive neonatal surgical conditions also included.	• Breastfeeding – very little on: o Methods of feeding preterm infants. o Transition from tube to cup to feeding at the breast. • KMC mentioned but not much written about the practice. • Little mentioned about local infections such skin, eyes, umbilicus.	• Most of the information up to date.	• A few mistakes noted – not sure if this is a final edition or not. • Gaps mentioned here are in manual listed below – use the two together.
		(9) Neonatal Intensive Care Unit (NICU) Training Participants' Manual	• Use this manual together with the above clinical guidelines. • Very comprehensive chapter on breastfeeding and all methods of feeding preterm and term infants. • Infections of skin, eyes included in this manual.	• All the gaps mentioned above are included in this manual in detail.	• Very up-to-date information.	• This document and the one above are extensive and very comprehensive in the theory and practise of neonatal care.
8	**Kenya**	(2) Kangaroo Mother Care Clinical Implementation Guidelines 2016	• Comprehensive.	• Not included: o Latest benefits of KMC. o How to handle a preterm baby to prevent stress. o How to support the mother in practicing cup feeding. o How to insert a gastric tube and how to feed the expressed breastmilk. o How to handle a preterm baby to prevent stress. • Tube feeding should always be given when the baby is secured in the KMC position. • Latest benefits of KMC not included. • Very little on the practice of intermittent KMC.	• Weight loss after birth should not be more than 10% (15% is never acceptable).	• Some of the gaps in these guidelines are covered in the Facilitators' and Participants' manuals listed below.

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
		(3) (KMC) Facilitators Manual	• Module 1: Low Birth Weight Babies (introduction to preterm/LBW babies; danger signs and common problems in LBW babies; hypothermia in the newborn). • Module 2: Kangaroo Mother Care (introduction to KMC for LBW babies; practice of KMC and skin-to-skin care; feeding, nutrition and growth monitoring in KMC; KMC discharge; counselling on KMC). • Module 3: Management of a Kangaroo Mother Care Program (establishment of KMC services; KMC supervision, monitoring and evaluation).	• **Module 1** o Handling of baby to prevent stress in infants not included. o Gaps in infection control. - Management of baby when mother has an infection such as flu, chickenpox, diarrhoea. - NB that health workers need to spray hands and equipment between patients. • **Module 2** o Intermittent KMC should last for at least one hour and not less. o Advisable to have a programme with set times when the mothers come to practice intermittent KMC. o Breastfeeding of the preterm baby should be initiated very early. See details in the text of the main report.	• Comparisons between incubator care versus KMC are not included in training anymore, as there is ample evidence of the benefits of KMC over incubator care. • Follow-up intervals for infants after discharge could be more discretionary. o It is not necessary for all babies to be seen weekly until the weight of 2,500 g. o The lower the weight of the baby, the sooner the baby should be followed up. As they gain weight and start growing well periods between follow-up visits could be extended. o If weight gain is poor, the baby should be seen sooner or be readmitted to exclude infection. • A good weight gain is at least 20g/day. If weight gain is less than 10 gram consider readmission.	
		(4) (KMC) Participants Manual	• Comprehensive: see above notes.			
		(8) Basic Paediatric Protocols for ages up to 5 years	• Guidelines for newborn care management: resuscitation; neonatal sepsis and antibiotic prophylaxis; neonatal jaundice; newborn care notes; continuous positive airway pressure (CPAP); newborn feeds / fluids ≥ 1.5kg (age < 7 days); newborn feeds / fluids < 1.5kg (age < 7 days); newborn drugs (age < 7 days).	• Only covers resuscitation, jaundice, antibiotics to use in sepsis and fluid or feed volumes. • Rudimentary.		• Not comprehensive – only a few, neonatal resuscitation and a few management charts and flow diagrams.
9	**Lesotho**	(7) Kangaroo mother care A practical guide				• Adaptation of 2003 WHO guide
		No documents received with sufficient detail on newborn or SSN clinical guidelines.				
10	**Madagascar**	Documents in French. Not evaluated.				

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
11	**Malawi**	(10) COIN Training Manual	• Comprehensive and includes most of neonatal care but could be updated.		• Paraldehyde for the treatment of convulsions in neonates.not advisable – see comments at end of the table and the report text.	• Needs updating.
		(9) KMC guidelines poster	• Poster on KMC practice. • Well thought-out guidelines on implementing, discharge and follow-up criteria.			
12	**Mozambique**	Documents in Portuguese. Not evaluated.				
13	**Namibia**	(2) Clinical Practice Guidelines for the Management of Neonates at a District Hospital	• Guidelines for resuscitation, respiratory problems, suspected infections, neonatal encephalopathy, hypoglycaemia, hypothermia, KMC and jaundice. • Tube and cup feeding and insertion of tube. • Immunisation advice.	• Little on breastfeeding.	• Outdated information for testing correct placement of naso- or orogastric tube in the stomach. Only mentions testing of acidity of gastric content aspiration with litmus paper and not the detection of a whistling sound by stethoscope when air is injected in the tube. • Contradictory information on steps to cup feed (p70): 1) Tip the cup to pour a small amount of milk at a time into the baby's mouth. 2) Allow the baby to feed at his own pace, ensuring small/weak babies have time to rest and breathe between spurts of drinking. Avoid pouring milk into the baby's mouth.	• Not very comprehensive. • Could be improved.

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
14	**Rwanda**	(2) Neonatal Protocol 2019	• Topics in all chapters covered comprehensively. • Chapter topics: Routine care of the well newborn; Assessment, triage and stabilization of the high-risk newborn; Neonatal Resuscitation; Thermoregulation; Nutrition and hydration in the newborn; Hypoglycaemia and hyperglycaemia; Respiratory disorders in newborns; Cardiology; Hyperbilirubinemia; Infectious diseases; Hematology; Neurology; Pain control; Quality of Care guidelines; Family centred care guidelines; Neonatal referral and transport; Common congenital anomalies; Discharge planning and follow-up; Palliative care on neonatal unit.	• Guide to incubator temperatures for babies according to birth weight would be helpful.		• Very complicated fluid and feeding schedule, but the diagram in the appendix is a good guide as to how to increase fluid volume daily.
		(1) Rwanda Neonatal Standards of Care Protocols and Norms with Referral Guidelines 2020	• Service standards listed from community level to tertiary level. • Lists of activities at the different levels. • Lists of work organization at the different levels. • Lists of materials and equipment needed at the different levels to provide the necessary services for neonatal care.			• Protocols very broad.
15	**Somalia**	No documents received with sufficient detail on newborn or SSN clinical guidelines.				
16	**South Africa**	(1) Neonatal Care Charts booklet	• Routine care at birth. • Management of the sick and small newborn. o Assess and classify. o Treat, observe and care. o Principles of newborn care. o Specific problems. o Discharge and follow-up. o Drug dosages, charts, recording forms and references.		• Therapy of seizures advises use of intravenous phenobarbitone. Only oral phenobarbitone currently available in South Africa. Thus, bolus therapy is given orally. If a baby is unable to take oral therapy, another drug to treat the seizure has to be given.	• This is to be used as a pocket guide by the treating doctor or health worker.

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
		(3) Management of Sick and Small Newborns in District Hospitals Trainee Manual	• Module 1 Assess and classify for: o Need for emergency care. o Priority signs. o Birth Injuries, abnormalities or local infections. o Risk factors and special treatment needs. • Module 2 Treat, observe and care; o Principles. o Specific problems. • Module 3 Counsel, discharge and follow-up.			
		(4) Management of Sick and Small Newborns in District Hospitals Facilitator Manual	• The Management of Sick and Small Newborn charts and training manual provide an approach to the assessment, classification and management of sick and small (i.e. preterm and LBW) babies from birth, during their stay in a health care facility up to the time of discharge, and also at follow-up. • Training based on ensuring that the competencies to care for newborn are acquired.			• Written for training of district hospital health care staff in managing and referring sick and small newborns to higher level facilities.
		(5) Management of Sick and Small Newborns Facilitator Guide to Clinical Practice	• Facilitator's guide for clinical practice and training using neonates in the neonatal unit.			
		(6)Facilitator and Course Directors Training Guide: Management of Sick and Small Newborns (MSSN)	• Topics covered: objectives of the facilitator & course director training; adult learning; learning styles, domains and methods; duties of MSSN facilitator; facilitation and motivating techniques; daily facilitator meetings; end-of-course evaluation; follow up and mentoring, including clinical mentoring.			
17	**South Sudan**	No documents received with sufficient detail on newborn or SSN clinical guidelines.				

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
18	**Tanzania**	(3) National Guideline for Neonatal Care and Establishment of Neonatal Care Unit Aug 2019	• Very comprehensive guide which includes the following neonatal issues: o Essential newborn care. o Care of preterm & LBW infants. o Care of the sick newborn. o Establishing a neonatal care unit.	• Very comprehensive. • On infant feeding more details with regard to tube feedings and how to insert a tube correctly could be added. • Cup feeding method guide.	• Fluid volume increases during the first week of life is out dated. The volumes could be increased much faster for term and late preterm infants.	• ENC – Used Helping Babies breath algorithm.
		(4) Protocols for Management of Sick Newborn in Health Facilities	• Charts & algorithms of how to manage sick newborns divided into: o General Protocols (Green). o Emergency Protocols (Red). o Routine Protocols (Yellow). o Reference protocols (Grey).	• How to insert feeding tube is included in this document. • This document is a summary and quick guide to the above guidelines.		• Information in a nutshell and quick to look up. • Could serve well as a doctor's pocketbook guide.
		(5) Operational Guide for Improving Quality of Facility Care for Newborn	• Epidemiological data on newborn mortality in Tanzania. • Guidelines on how to establish a neonatal care unit (NCU) aiming at supporting and facilitating planning, establishment, operationalization and monitoring of NCUs at various levels of health sytem. Mainly focus on requirements, specifications and processes related to establishment of NCU.			This information is also included in the National Guideline for Neonatal Care and Establishment of Neonatal Care Unit document but it is more detailed.
		(7) Standard Treatment Guidelines and Essential Medicines List for Children and Adolescents	• A paediatric guideline including conditions in older children. • Chapter 3 includes diseases of the newborn and young infant.			• Repetition of previous guidelines in management of neonates. • Paediatric chapters in this guide were not screened.

	COUNTRY	DOCUMENT	TOPICS WELL COVERED	GAPS	OUTDATED / PROBLEMATIC INFORMATION	OTHER REMARKS
19	**Uganda**	(2) Pocket Guide for Management of small and sick newborns in Health Center IVs and Hospitals	• Most of the important neonatal care topics covered and correct management of most topics, e.g. o resuscitation techniques; o insertion of oro- or nasogastric tube procedure. • Discharge criteria – most aspects considered but the weight and gestational age of baby are not safe limits. • Jaundice graphs adapted from Western Cape in South Africa.	• Details on feeding could be improved. • No specific infections discussed such as opthalmia neonatorum, congenital syphilis, necrotising enterocolitis.	• Discharge criteria from KMC – weight of 1.2 kg or 33 weeks gestation is very early: o Proper cup- and breastfeeding difficult to establish at this age (Baby is usually more mature at 34 weeks). o These babies could suffer from apnoea of prematurity.	• Could do with updating. • Could include management of specific infections and blood transfusions.
20	**Zambia**	No documents received with sufficient detail on newborn or SSN clinical guidelines.				
21	**Zimbabwe**	(3} Zimbabwe National Neonatal Care Guidelines 2017	• Information on Vit K therapy. • Guidelines for suspected infections. • Management guidelines for congenital syphilis. • Newborn physical examination. • Newborn danger signs. • Referral chapter explains process well. • Management of umbilical cord infection well explained. • Good chapter on the small and preterm infant. • Indications for blood transfusion and method.	• Poor guidelines on congenital abnormalities and management, or when to refer. • No mention of using another tool to score gestational age. • Management of eye care could be expanded. • Caffeine therapy advised to be given for only 7 days. May need longer therapy depending on gestational age of baby. • Optimal feeding for HIV-exposed infants not discussed. • Supplements for premature babies: phosphate supplements in VLBW babies not included. • Missing elements on family-centred care and kangaroo mother care – all carers should be enabled to participate actively in the newborn's care. • Breastfeeding could be discussed in more detail, especially establishing breastfeeding in small and preterm infants. • Jaundice management has gaps in when to start treatment.	• Some management of neonatal encephalopathy is outdated.	• Could be more comprehensive and updated.

Annexure D: Example of a more comprehensive list of documents (Madagascar)

List of documents linked to new-born care and service delivery

A. DOCUMENTS DE POLITIQUES ET STRATÉGIES

1. National Health Policy
2. National Child Health Policy, 2019 Edition.
3. RMNCAH Investment Case
4. National Strategy on Universal Health Coverage UHC

B. NATIONAL AND OPERATIONAL PLANS

5. Health Sector Development Plan 2020-2024
6. National Plan of Action for Nutrition 2017-2021 PNAN III
7. National Plan for the Elimination of Mother-to-Child Transmission of HIV, Syphilis and Hepatitis B (eTME), 2019 - 2030
8. Roadmap for Accelerated Reduction of Maternal and Neonatal Mortality 2015-2019 (ARMNM)
9. ARMNM Operational Plan 2015-2019 integrating Every Newborn Action Plan - ENAP

C. TECHNICAL GUIDELINES, PROTOCOLS AND STANDARDS

10. Standards and Procedures, in Reproductive Health 2018 edition.
11. National Guideline for Maternal and Perinatal Death Surveillance and Response
12. National Guideline for Monitoring Emergency Obstetric and Neonatal Care.
13. National List of Essential Drugs and Health commodities in MADAGASCAR, 2019.
    - 13.1 Use of Chlorhexidine for umbilical care;
    - 13.2 The implementation of breastfeeding corners in ministries, companies and workplaces.
14. Technical Guidance on:

D. DOCUMENTS RELATED TO SERVICES DELIVER

15. Operational Plan on the Implementation of the Recommendations of the Emergency Obstetric and Neonatal Care Needs Assessment 2012-2015
16. 2016 SARA Survey
17. Monitoring EmONC 2019 Report

E. OTHER DOCUMENTS

18. Commitment for Every Newborn Action Plan
19. Training documents: EmONC including PSBI management, Essential Maternal and Neonatal Care, Medical Resuscitation and Maternal Survival, Chlorhexidine and Misoprostol Use; ANJE/NdF

19.1

19.2

19.3

20. Xxx

21.Xxx

PARTNERSHIPS and Champions of maternal and new-born health	**LIST KEY PARTNERS IN MNH:** – **Partners**: UNICEF- OMS- UNFPA-UNAIDS-USAID- BM – **NGO:** Marie Stopes-JHPIEGO- JSI- MSH- PIVOT- PSI- LDS – Médecins du Monde **NATIONAL TWG:** – **Groupe H6:** OMS, UNICEF- OMS- UNFPA- USAID- BM – **Thematic Technical Groupe:** MNCH : DSFa, SMSR, SSE, SRA, DLIS, UNICEF- OMS- UNFPA- USAID (MCSP, Mikolo, Mahefa)- BM, PSI, Marie Stopes Madagascar

Annexure E: Resources from reliable websites

Organisation	Description	Website
World Health Organization	• Standards for improving the quality of care for small and sick newborns in health facilities • References for evidence for quality statements	https://www.who.int/publications/i/item/9789240010765
Health Newborn Network	• "Addressing critical knowledge gaps in newborn health" • Resources from Eswatini, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Rwanda, Somalia, South Africa, South Sudan, Tanzania, Uganda, Zambia and Zimbabwe	https://www.healthynewbornnetwork.org/ Click on Resources
Global Health Media	"Our mission is to improve health care and health outcomes in resource-poor areas by developing videos that 'bring to life' basic health care information known to save lives." Videos on a variety of maternal, newborn and child health topics for health workers and mothers/parents downloadable on different devices ranging from laptop to basic phone available in a variety of languages, including English, French and Spanish free (registration required)	https://globalhealthmedia.org/ Click on Videos and Animations
Better Care Learning Programmes	• The website provides the learning programmes • People conduct their own training and learning on site, wherever they are • Free reading on the learning station (including case studies)	https://bettercare.co.za/learn/
Maternal and Child Health Advocacy International (MCAI)	• A wealth of resources, including teaching materials, lectures and presentations, and manuals and books • Free to download • There is a newly updated handbook (June 2021): Handbook on Hospital Care for Newborn Infants (https://www.mcai.org.uk/)	https://www.mcai.org.uk/
NEST360° (Newborn Essential Solutions and Technologies)	• Goal: "NEST360° is committed to reducing neonatal mortality in sub-Saharan African hospitals by 50 percent" • "… a global consortium committed to ensuring that every hospital in Africa can deliver life-saving care for small and sick newborns. NEST360° is an evidence-based model for sustainable health systems change to close gaps in technology, markets, and human resources for implementation of quality hospital-based newborn care at national scale." • Phase 1 countries: Kenya, Malawi, Tanzania • Clinical and technical modules and scenarios • Toolkit that brings together the resources for newborn care and the care of the small and sick newborns	https://www.nest360.org/ Click on Resources https://www.newborntoolkit.org/

Organisation	Description	Website
Every Preemie—Scale	• Do No Harm technical briefs (in English and French): - Safe and Effective Oxygen Use for Inpatient Care of Newborns - Safe and Effective Infection Prevention for Inpatient Newborn Care - Safe and Effective Thermal Protection for Inpatient Care of Newborns - Prevention and Screening of Retinopathy of Prematurity (ROP) - Family Participation in the Care of the Inpatient Newborn - Safe and Effective Human Milk Feeding for Small and Sick Newborns - Management of Newborn Infections During Inpatient Care • Training material for Family-Led Care (Global Package) • Country profiles for Ethiopia, Kenya, Madagascar, Malawi, Rwanda, South Sudan, Tanzania, Uganda, Zambia	https://www.everypreemie.org/
American Academy of Pediatrics (AAP)	• "Children – no matter where they are born – deserve to benefit from the expertise of AAP members and programs." • Training programmes in Helping Babies Survive (including Helping Babies Breathe) • Variety of learning materials at no cost available under International Resources (translated versions in 25+ languages) (https://internationalresources.aap.org/) – you have to create an account • Link to other training sites (https://services.aap.org/en/aap-global/global-health-resources/) – External Resources: scroll under Maternal and Newborn Health	https://www.aap.org/en-us/Pages/Default.aspx Click on International https://services.aap.org/en/aap-global/ Click on Global Presence Click on Helping Babies Survive
Save the Children, Maternity Foundation, Laerdal	• Newborn Health Resources: Trainings and tools for improving newborn health in humanitarian settings	https://www.healthynewbornnetwork.org/issue/emergencies or https://resourcecentre.savethechildren.net/node/18082/pdf/hnn-resource-cards_web.pdf
World Continuing Education Alliance (WCEA)	• In-service training courses for health workers, especially nurses • Some courses and webinars are free; others are paid for • ONE World website (https://oneworld.wcea.education/): - for healthcare organizations or professionals in Africa - specific goal of improving health outcomes	https://wcea.education/
The Global Health Network	E-learning courses	https://globalhealthtrainingcentre.tghn.org/elearning/#Women

Organisation	Description	Website
Align MNH	• Aim: "to rapidly share science, evidence and programmatic experience across the maternal and newborn health communities." • "Driven by country priorities, we create space for stakeholders to share, learn, problem solve and align around priority issues for improving maternal and newborn survival and preventing stillbirths.") • Links to various communities of practice (https://alignmnh.org/communities-of-practice/)	https://alignmnh.org/
Jpiego	Moving Integrated, Quality Maternal, Newborn and Child Health and Family Planning and Reproductive Health Services to Scale (MOMENTUM)	https://www.jhpiego.org
Fundación Canguru (Kangaroo Foundation, Colombia)	• Educational materials • Abstracts, proceedings and presentations of the international workshops and congresses • Practical guidelines • Publications	https://fundacioncanguro.co/documentos/?lang=en

Annexure F: Graphic depiction of different terminologies

Source consulted

- American Academy of Pediatrics. Definitions Explained: Standards, Recommendations, Guidelines and Regulations. In: American Academu of Pediatrics, American Public Health Association, National Resource Centre for Health and Safety in Child Care and Early Education Caring for Our Children. National Health and Safety Performance Standards: Guidelines for Early Care and Early Education Program (3rd ed). 2017. https://ebooks.aappublications.org/content/caring-for-our-children-3rd-edition
- Bahadur P. Differnce between Guideline, Procedure, Standard and Policy. https://www.linkedin.com/pulse/20140611162901-223517409-difference-between-guideline-procedure-standard-and-policy/
- Bettal Consultant. Understanding the difference between policies, procedures, protocols and guidance, PPPGs, Posted Jnauary 29, 2020. https//www.bettal.co.uk/understanding-the-difference-between-policies-procedures-protocols-and-guidance-pppgs/

- Douketis JD, Weltz JI. Guidance, guidelines and communications. Journal of Thrombosis and Haemostasis. 2014;12(10):1744-5.
- FRSecure, Security Policies, Standards, Procedures and Guidelines. https://frsecure.com/blog/differentiating-between-policies-standards-procedures-and-guidance/
- Hewitt-Taylor J. Clinical guidelines and Care Protocols. Intensive Critical Care Nursing. 2004;20(1)45-52.
- Internationational Federation of Ageing. Guidelines and Protocols. https://drbarometer.com/communities-of-practice/guidelines-and-protocols
- Khan MA. WHAT IS MANUAL, SOP, GUIDELINE, PROGRAMME, POLICY, PROCEDURE AND PLAN. https://www.slideshre.net/mahboob804/what-is-manual-sop-guideline-programme-policy-procedure-and-plan-by-drmahboob-ali-khan-phd??from_action=save
- Michalsons. The difference between a policy, procedure, standard and guidelines. https://www.michalsons.com/blog/the-difference-between-a-policy-procedure-standard-and-a-guideline/42265
- New Mexico State University. Purpose and definitions. https://itpolicies.nmsu.edu/purpose-and-definitions-it-policy-site/

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