

SURVIVE and THRIVE

Transforming care for every
small and sick newborn



WHY THIS REPORT?

- **Urgency:** a decade to meet SDG targets, and those for every newborn to survive, and thrive are off track, maybe more so after COVID-19 pandemic. Some countries may not meet SDG3.2 target until a century too late
- **UHC:** Small & sick newborns are our most vulnerable citizens and their care is a key part of UHC. Every country can do more
- **Opportunity:** 94 authors from every continent (except Antarctica!) have been involved, showing wide commitment to this issue.

Chapter 1: Now is the time to transform care for newborns

Chapter 2: What the numbers say

Chapter 3: Deliver the care they are entitled to **NOW!**

Chapter 4: Ensure they thrive

Chapter 5: Use data for action

Chapter 6: Immediate action is needed





THE AGA KHAN UNIVERSITY



SURVIVE and THRIVE: Transforming care for every small and sick newborn

#EveryNewborn #EveryChildAlive

AGENDA – Session 1

Facilitator: Dr. Ornella Lincetto, Senior Medical Officer, WHO

- Introduction to the webinar series and the speakers – Dr. Ornella Lincetto, World Health Organization
- Key findings of ‘Deliver the care they are entitled to’, Chapter 3 of the *Survive and Thrive* report:
 - Dr. Ornella Lincetto, Senior Medical Officer for Newborn Health, World Health Organization
 - Dr. Sarah Moxon, Research Fellow, London School of Hygiene and Tropical Medicine
- Improving care practices in a neonatal unit in Ouagadougou, Burkina Faso – Dr. Paul Ouedraogo, Director of Saint Camille Hospital, Ouagadougou
- Defining the characteristics for innovations to support the care of newborns in low-resource settings – Becca Kirby, Market Access Director for Newborn Essential Solutions and Technologies (NEST360°)
- COVID-19 in pregnant women and newborns: latest guidance – Dr. Ornella Lincetto, World Health Organization
- Questions and answers
- Closing and next webinar



Dr. Ornella Lincetto



Dr. Sarah Moxon



Dr. Paul Ouedraogo



Becca Kirby

CHAPTER 3

**Deliver the care
they are entitled to**



KEY MESSAGES

1. **SURVIVE:** Cost-effective, evidence-based solutions are available to prevent newborn deaths and disability.
2. **THRIVE:** Quality care requires an integrated, resilient health system, multidisciplinary teams, and innovation.
3. **TRANSFORM:** Reducing barriers and discrimination is crucial to reaching all newborns and their families.

KEY MESSAGES

1. SURVIVE: Solutions to prevent newborn deaths



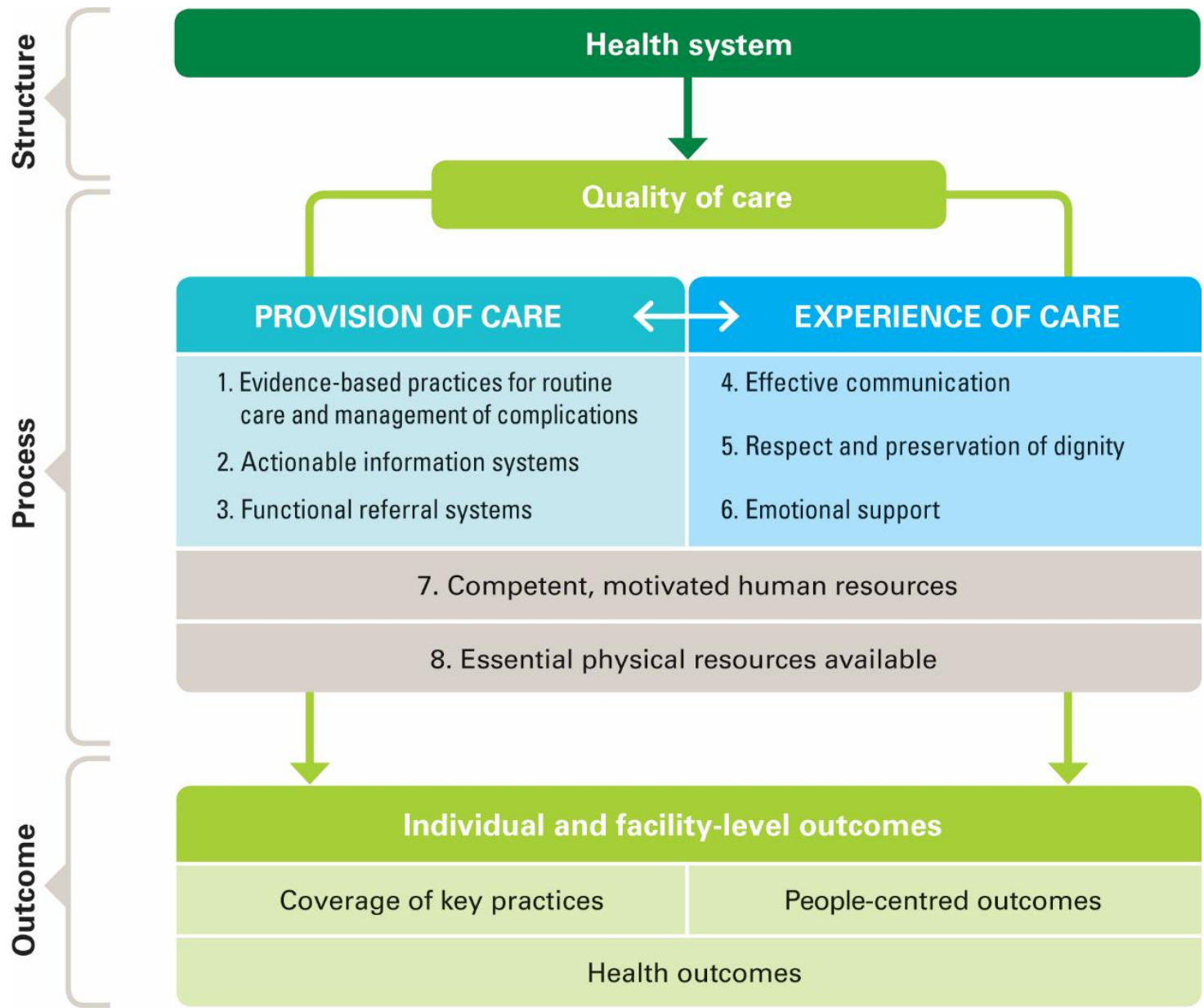
Coverage with quality, dignified care

- **Universal Health Care** packages should include locally-defined, high-impact, cost-effective interventions for care of small and sick newborns
- Strengthen health systems to **increase coverage** of neonatal interventions and **improve quality** of newborn services with **family-centered** model of care
- Quality services increase likelihood of timely, appropriate care, considers preferences and aspirations of women and families



Quality, Equity, Dignity

A Network for Improving Quality of Care for Maternal, Newborn and Child Health

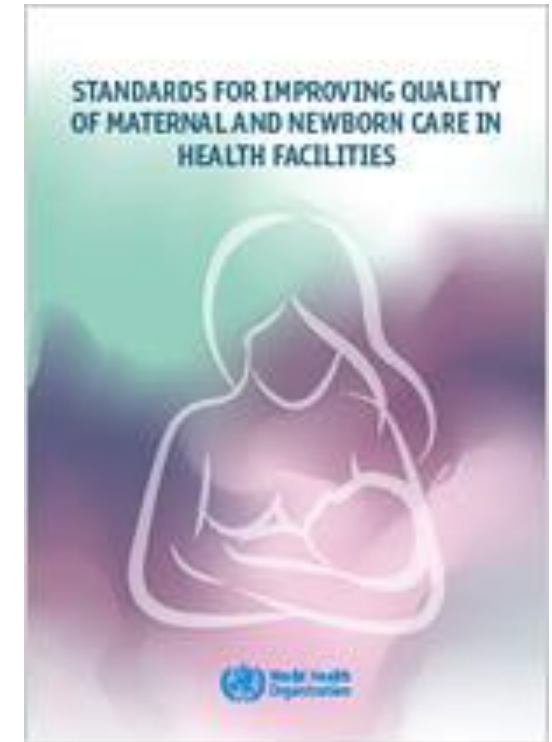


WHO quality of care framework

Adapted from: WHO. Standards for improving quality of maternal and newborn care in health facilities, 2016.

The importance of evidence-based practice

- Incorporating scientific knowledge into practices helps providers deliver high-quality care
 - Requires stakeholder engagement and commitment
- Countries can use WHO international standards & guidance to develop own national standards
- Need readily available guidelines and protocols, along with training, at all levels of health system
- Continued health-care education ensures that staff are up to date with best clinical practices



Benefits of intermittent and continuous kangaroo mother care



Population	Benefits
Low birthweight newborns, especially preterm	<ul style="list-style-type: none">• Reduces mortality by up to 50% in newborns weighing <2000g when compared with conventional care<ul style="list-style-type: none">• Evidence particularly strong in LMICs
Newborns and families in all settings	<ul style="list-style-type: none">• Improves duration of breastfeeding, weight gain, physiological stability• Supports parent-infant bonding, child development• Shortens length of stay in hospital
Healthcare providers, especially nurses	<ul style="list-style-type: none">• Sustained investment and quality implementation can reduce workload• Reduced cost

Developmentally supportive care and neuroprotection

- Excessive handling can disturb a newborn's sleep, well-being, and growth. To minimize disturbance:
 - Providers should “cluster care” into 1 caregiving period
 - Maximize contact with parents (esp. mothers)
 - Correctly position newborn
- Pain affects brain development, with potentially long-term effects
 - Providers need to recognize pain cues and know how to prevent and minimize pain
- **Dignified care** = respectful care for the newborn and parents/caregivers



Guidelines for pain management



“Neonates are frequently subjected to painful procedures, with the most immature infants receiving the highest number of painful events.”

– American Academy of Pediatrics, 2016

- Health-care facilities should minimize the number of painful procedures performed on newborns, while routinely assessing and treating pain
- Each institution should develop its own evidence-based written guidelines

KEY MESSAGES

2. THRIVE:
Quality care requires an integrated resilient health system, multidisciplinary teams, and innovation



Organizing services by level of care

Level	Type of care	# of newborns
Primary	Immediate & essential newborn care <ul style="list-style-type: none"> • INC (eg. delayed cord clamping, drying, skin to skin) • Neonatal resuscitation for those who need it • Breastfeeding early initiation and support • Identification and referral of complications • Targeted care as needed (eg. PMTCT of HIV) 	140 million per year
Secondary	Special newborn care <ul style="list-style-type: none"> • Thermal care/KMC for stable neonates < 2000g • Assisted feeding and IV fluids • Safe administration of oxygen • Detection and management of: <ul style="list-style-type: none"> ◦ Neonatal sepsis with injection antibiotics ◦ Neonatal jaundice with phototherapy ◦ Neonatal encephalopathy ◦ Congenital abnormalities 	30 million
Transition	<ul style="list-style-type: none"> • CPAP management of preterm respiratory distress • Follow up of at-risk newborns • Exchange transfusion 	
Tertiary	Intensive newborn care <ul style="list-style-type: none"> • Mechanical/assisted ventilation • Advanced feeding support (eg parenteral nutrition) • Investigation and care for congenital conditions • Screening and treatment for RoP 	8-10 million

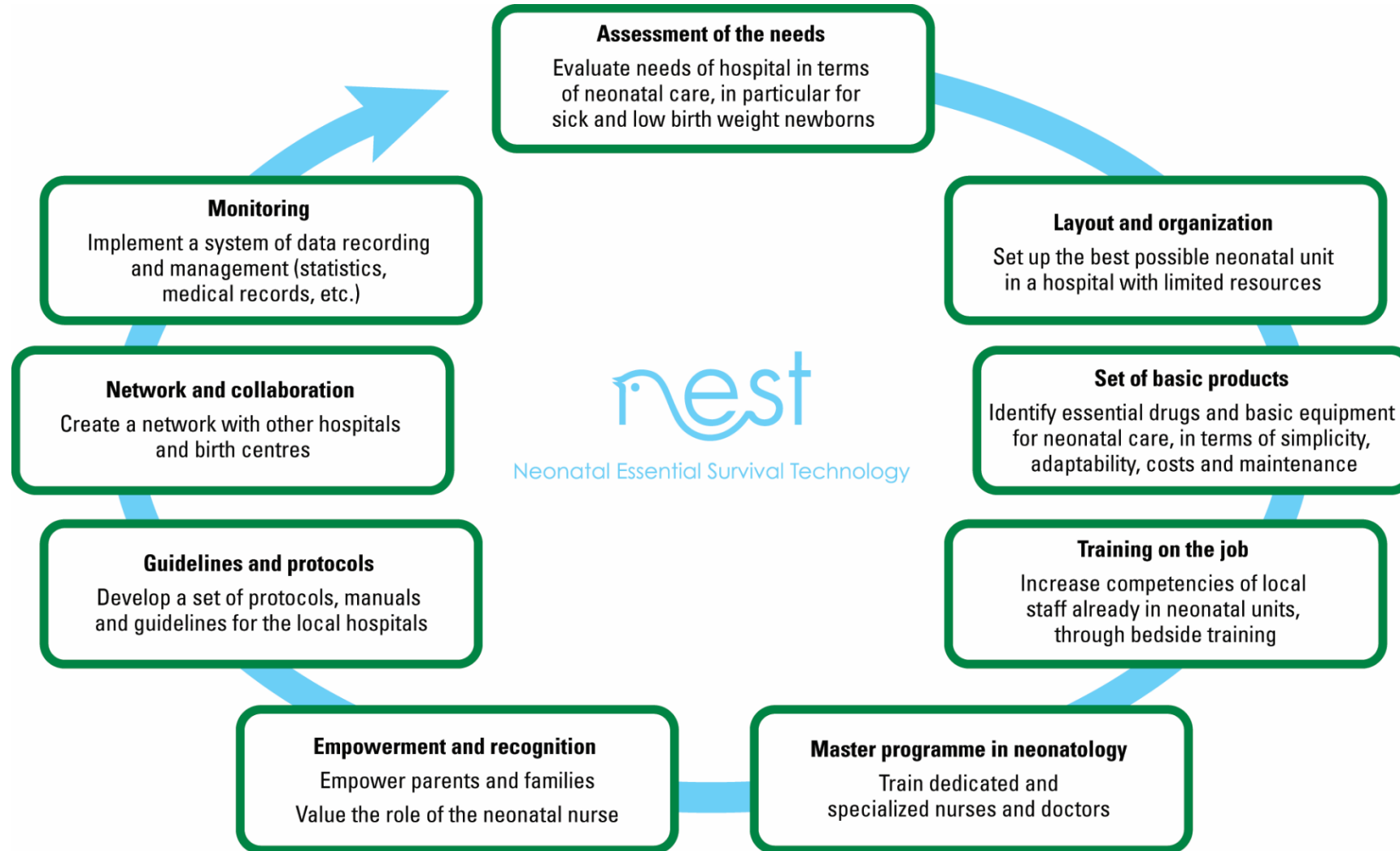
What physical resources are needed to provide care?

- Infrastructure
- Health technologies
- Medicines
- Equipment
- Diagnostics
- Innovation



9 steps to success in Burkina Faso

NEST launched in 2015 at Saint Camille Hospital, Ouagadougou



Who provides care?

1. Multidisciplinary teams of competent and motivated health professionals

- Small and sick newborn survival in facilities closely linked to # of *qualified nurses* working per shift

For providers to deliver quality, people-centred care, need:

- Attractive staff recruitment policies
- Supervised experiences for newly deployed nurses
- Formalized task-shifting and task-sharing
- Strong pre-service education in neonatal care
- Sufficiently large neonatal nursing cadres
- Education and mentoring to improve quality



Who provides care? (cont.)

2. Parents and families

Benefits

- Boost parent–newborn attachment
- Ensure higher breastfeeding rates
- Facilitate earlier discharge
- Improve long-term neurodevelopment
- Encourage reciprocal, cue-based interactions
- Promote developmentally supportive care
- Improve health-related knowledge and beliefs among parents and communities



Parental involvement should not exceed parent's comfort levels and should not replace qualified staff.

Nurses as leaders for quality improvement



*“Making quality improvement teams and **keeping nurses as the primary drivers of this change in special care is important.**”*

– Dr Ashok Deorari

Professor of Pediatrics, WHO Collaborating Centre for Training and Research in Newborn Care at All India Institute of Medical Sciences

*“We have many **challenges as nurses and midwives trying to establish a professional neonatal career path** with no clear scope of practice to guide our care.”*

– Pacifique Umubyeyi

Neonatal health nurse, Rwanda Military Hospital



*“[Anila] provides the best patient care... She has been **a catalyst in standardizing the care of newborns.**”*

–Colleague of Anila Ali Bardai

Head NICU nurse, Agha Khan University Hospital, Pakistan

KEY MESSAGES

3. TRANSFORM: Reducing barriers and discrimination to reach all newborns and families



Ensuring access to quality care for all without discrimination



Vulnerable groups

- Migrants and ethnic minorities
- Girl newborns
- Newborns with congenital abnormalities
- Abandoned newborns

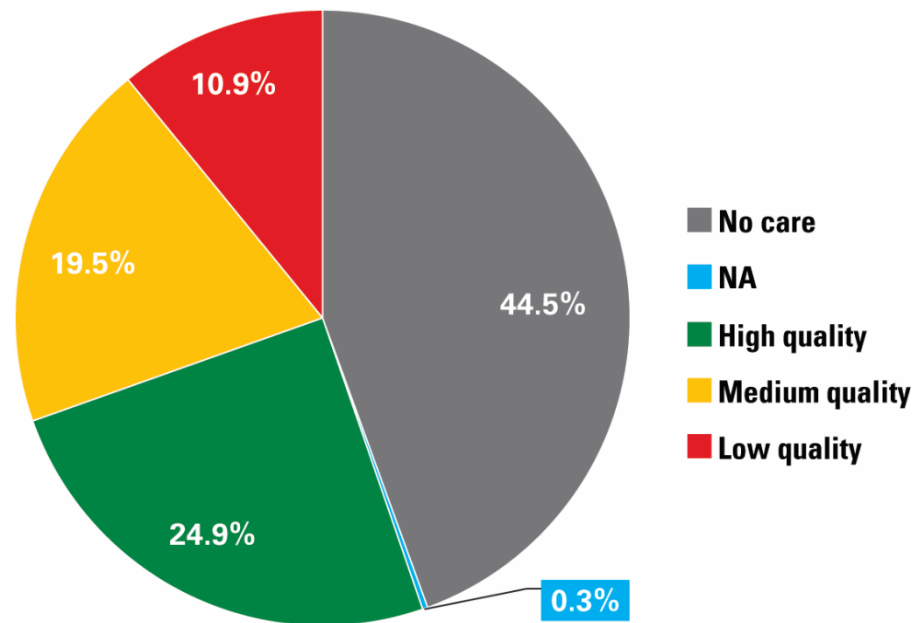
Financial barriers

- Neonatal mortality is usually highest for those born in poorest households

Effective coverage of newborn services in Nairobi, Kenya

Nairobi City County

- 60-70% of population lives in slums
- ~88.7% of births take place at health facilities (vs. 61.2% nationally)
- NMR = 39 per 1000 live births (vs. 19–25 elsewhere in Kenya)



Newborn services coverage in Nairobi

Nairobi Newborn Study Findings

- 29/33 facilities identified were private sector
- 4 public facilities accounted for 71% of all neonatal admissions
- Only ¼ of newborns who needed inpatient care accessed high-quality services

China addresses social and financial barriers

Context

- Neonatal death accounts for 60% of under-5 mortality
 - 70% occur in 1st week of life
- Urban-rural disparities



Social autopsy in rural Yunnan and Xinjiang, 2011

- 97.4% mothers, 7.5% newborns medically insured
- 45% newborns face 1st delay (decision to seek care)

Subsequent government actions

- Improved newborn insurance coverage
- Identified average unit cost for budgeting
- Raised caregiver awareness about newborn danger signs
- Developed contingency plans for referrals

Newborn health in humanitarian crises

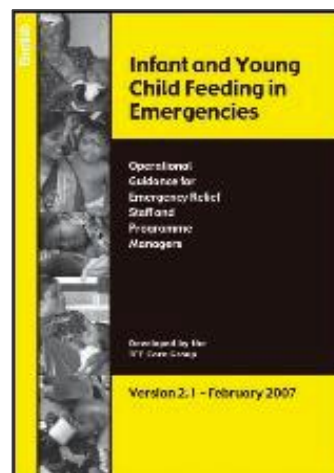
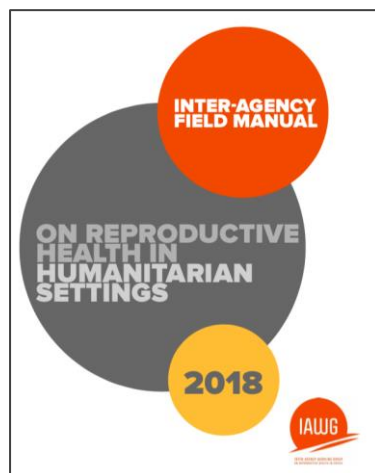
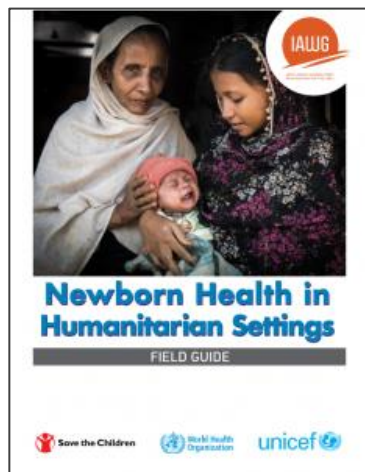
Accessing care

- Low access to health facility → high rates of home births, low rates of care-seeking

Care coordination and referral

- Emergency preparedness plan should include contingencies for referral and transport to care

Guidelines on service provision



Country	NMR, 2017
1. Pakistan	44
2. Central African Republic	42
3. South Sudan	40
4. Afghanistan	39
5. Somalia	39
6. Lesotho	38
7. Guinea-Bissau	37
8. Mali	35
9. Chad	35
10. Côte d'Ivoire	34
11. Mauritania	34
12. Sierra Leone	34
13. Nigeria	33
14. Benin	33
15. Comoros	32
16. Djibouti	32

Sources: World Bank, Harmonized list of fragile situations 2018; United Nations Inter-agency Group for Child Mortality Estimation. Estimates for NMR in 2017.

To end preventable newborn and child deaths, care for small and sick newborns requires:

- High coverage of quality neonatal services, with family-centered models of care, organized in a network of facilities with a functional referral system
- Sufficient numbers of health-care providers with skills to care for small and sick newborns, working in partnership with parents and families
- Reaching marginalized populations



***Action must be taken now
to save more than 1.7 million newborns each year.***

Acknowledgements

Authors for Chapter 3

Ornella Lincetto, Carolyn MacLennan, Sarah Moxon, Georgina Murphy, Linda Frank, Louise Day

Managing Editors for the Report

Lily Kak, Joy Lawn, Ornella Lincetto, Gina Murphy, Judith Robb-McCord, Nabila Zaka

PowerPoint slides and graphics

Stefanie Kong, Kayley LeFaiver

Overall >94 authors and experts from all over the world have input and all are appreciated!

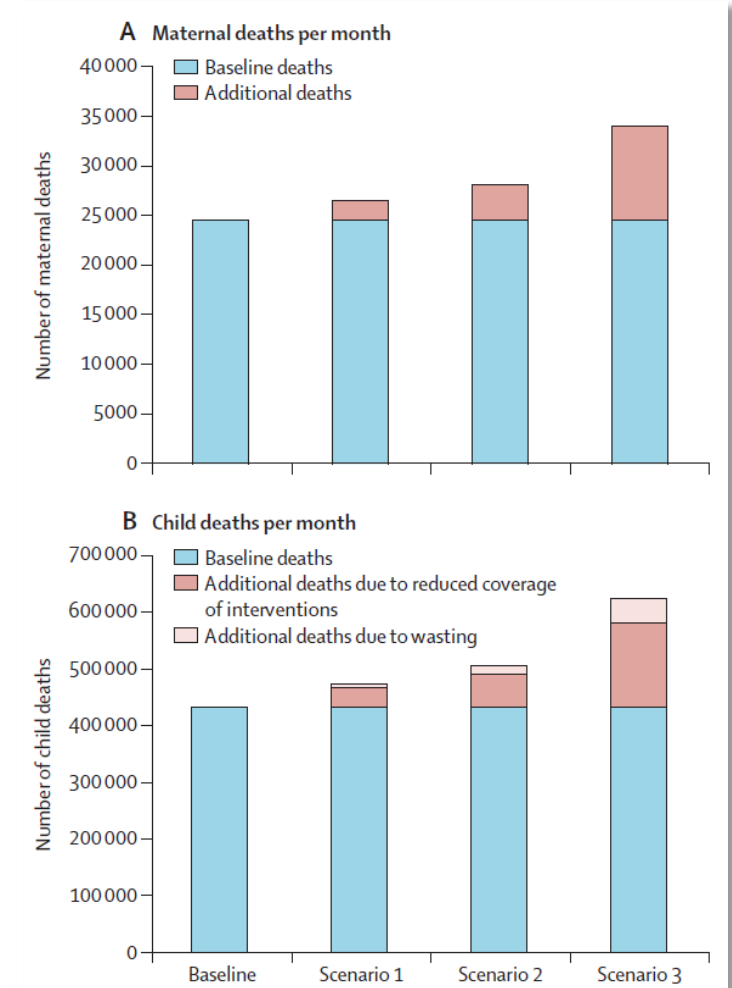
SURVIVE and THRIVE

Transforming care for every
small and sick newborn



Progress toward decreasing maternal and newborn deaths and stillbirths is threatened

- Pregnant women are at increased risk of mortality and negative outcomes because of reduced access to facility births / births with skilled health professionals due to deployment of staff to care for COVID patients and reduced care-seeking at health facilities due to fears about COVID-19 exposure and restrictions.
- Although newborns are less likely to die from COVID they are now at increased risk for mortality from other preventable and treatable conditions as access and availability to health services are disrupted due to the COVID pandemic.

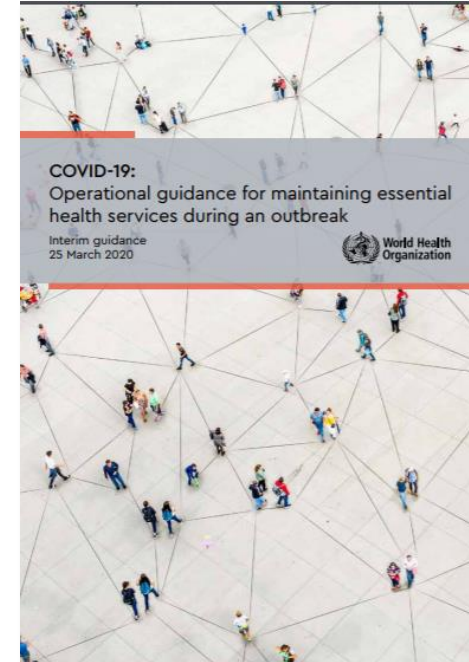


Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. *The Lancet Global Health*.

Overall Guidance on Maintaining Services

- Operational guidance on maintaining essential health services during an outbreak
- Community-based health care, including outreach and campaigns, in the context of the COVID-19 pandemic
- Maintaining essential services: operational guidance for the COVID-19 context – Chapter 2 on life course and disease considerations

<https://www.who.int/publications-detail/10665-332240>



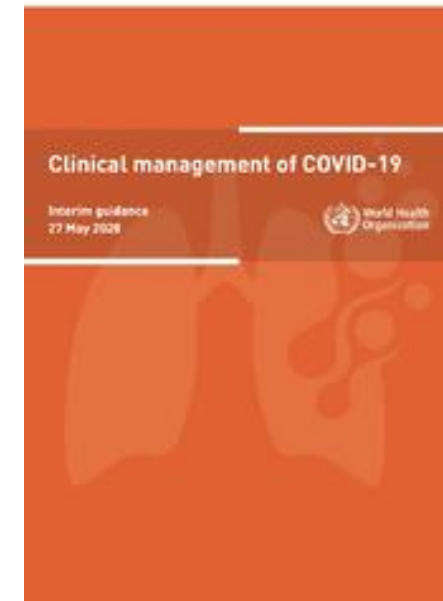
Maintaining essential MNH services in the COVID-19 context



- Consider the capacities of both facility- and community-based services to provide continuation of MNH services
- All essential elements of antenatal care (ANC) and postnatal care (PNC) should be maintained
 - Prioritize high risk mothers and newborns
 - Ensure target outreach strategies and catch-up contacts
 - Use digital platforms for counseling and screening of danger signs
- Women and newborns should have access to skilled care at all times, including referral for management of complications
 - Ensure birth companion
 - Encourage skin-to-skin and early initiation of breastfeeding
- Essential commodities and supplies should be in stock and available for ANC, childbirth, and PNC

Care of small and sick newborn possible adaptations

- Limit the number of caregivers providing KMC support to 1-2 persons trained in IPC with PPE
 - Develop strategies to enable support to continue KMC at home
 - Consider early discharge with follow-up of stable PT and LBW infants
 - Ensure parents are screened for COVID-19 before entering the NICU
- See WHO guidance on clinical management of COVID-19 disease for management of pregnant or lactating women or newborns with suspected or confirmed COVID-19: <https://www.who.int/publications-detail/clinical-management-of-covid-19>



Check out the webinar series: bit.ly/NewbornSeries

Register for the next webinar on 17 June: Ensure they thrive

Register for 8 am GMT session: bit.ly/17JuneS1

Register for 11 am GMT session: bit.ly/17JuneS2

**Join the conversation: #EveryNewborn
#EveryChildAlive**

