



EVERY WOMAN
EVERY CHILD

Global
**MATERNAL
NEWBORN**
Health Conference

*reaching every mother and newborn
with quality care*

EVERY NEWBORN

An Action Plan To End Preventable Deaths

Measurement improvement roadmap



World Health
Organization

unicef 



COMMITTING TO CHILD SURVIVAL
A PROMISE RENEWED

#globalmnh #EveryNewborn

Overview of panel

	Moderator	Suzanne Fournier	5mins
1	Count every newborn: a 5-year measurement improvement roadmap	Joy Lawn	15 min
	IMPACT		
2	Counting births, neonatal deaths and cause of death: Improving measurement especially in vital registration	Peter Waiswa	15 min
	COUNTING COVERAGE AND QUALITY AND LINKING TO ACTION		
3	Care for all mothers and newborns: Measuring coverage and content of care	Agbessi Amouzou	12mins
4	Care for newborns with complications: Measuring coverage and content of care	Sarah Moxon	12 mins
5	Counting every stillbirth and neonatal death: Perinatal audit tools and implementation for improving quality of care linked to maternal death surveillance and response	Kate Kerber	10 mins
	DISCUSSION PANEL Tanzania and improving and using the data, links to scorecards Bangladesh and improving and using the data WHO's role in co-ordinating maternal and newborn metrics	Georgina Msemo Shams El Arifeen Matthews Mathai	3 mins each
	Discussion from the floor		10mins
	Close		5 mins

Where to get more information



Lancet *Every Newborn* series: <http://www.thelancet.com/series/everynewborn>

Every Newborn Action Plan (ENAP):

http://www.who.int/maternal_child_adolescent/topics/newborn/enap_consultation/en/



BMC Pregnancy and Childbirth series:

<http://www.biomedcentral.com/bmcpregnancychildbirth/supplements/15/s2>

ENAP WHO meeting report:

http://www.who.int/maternal_child_adolescent/documents/newborn-health-indicators/en/



MARCH MOOC:

<http://www.lshtm.ac.uk/study/freeonlinecourses/women-children-health/index.html>



UNICEF: www.childmortality.org

Healthy Newborn Network:

<http://www.healthynewbornnetwork.org/page/newborn-numbers>



INDEPTH: <http://www.indepth-network.org/>



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Care for newborns with complications: Measuring coverage and content of care

Sarah Moxon



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Indicators to track progress of Every Newborn Action Plan

Current Status		Core ENAP Indicators	Additional indicators
Definitions clear but quantity and consistency of data lacking	Impact	1. Maternal mortality ratio 2. Stillbirth rate 3. Neonatal mortality rate	Intrapartum stillbirth rate Low birth weight rate Preterm birth rate Small for gestational age Neonatal morbidity rates Disability after neonatal conditions
Contact point definitions clear but data on content of care are lacking	Coverage: Care for All Mothers and Newborns	4. Skilled attendant at birth 5. Early postnatal care for mothers and babies 6. Essential newborn care (tracer is early breastfeeding)	Antenatal Care Exclusive breastfeeding up to 6 months
Gaps in coverage definitions, and requiring validation and feasibility testing for HMIS use	Coverage: Complications and extra care	7. Antenatal corticosteroid use 8. Neonatal resuscitation 9. Kangaroo mother care 10. Treatment of serious neonatal infections	Caesarean section rate Chlorhexidine cord cleansing
	Input: Service Delivery Packages for Quality of Care	Emergency Obstetric Care Care of Small and Sick Newborns Every Mother Every Newborn Quality Initiative with measurable norms and standards	
	Input: Counting	Birth Registration	Death registration, cause of death

Focus of this talk

Shaded= Not currently routinely tracked at global level

Bold red= Indicator requiring additional testing to inform consistent measurement

Indicators to be disaggregated by equity such as urban/rural, income, and education

Adapted from WHO and UNICEF, Every Newborn Action Plan. WHO, 2014. www.everynewborn.org and Mason et al Lancet 2014

Outline

- What is the status of coverage indicators for newborns with complications?
- What to do to improve this data?
 - Testing validity and feasibility
- Improving service readiness indicators for small and sick newborns

Moxon et al. *BMC Pregnancy and Childbirth* 2015, **15**(Suppl 2):S8
<http://www.biomedcentral.com/1471-2393/15/S2/S8>

RESEARCH

Open Access

Count every newborn; a measurement improvement roadmap for coverage data

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33
authors!

Coverage indicators for validation & feasibility testing

	Numerator	Denominator
Antenatal corticosteroid (ACS) use	All women giving birth in facility <34 weeks who received one dose of ACS	<p>Denominator = biggest challenge!!</p> <p>Target population for coverage for that specific intervention: e.g. neonates “needing” resuscitation</p> <p>Other options</p> <ul style="list-style-type: none"> a) Live births in facility b) Total births in facility (including stillbirths) c) Estimated births (live or total)
Newborn Resuscitation	Number of newborns who were not breathing spontaneously/crying at birth for whom resuscitation actions (stimulation and/or bag and mask) were initiated	
Kangaroo Mother Care (KMC)	Number of newborns initiated on facility based KMC	
Treatment of Serious Neonatal Infection	Number of newborns that received at least one dose of antibiotic injection for PSBI in the facility	

Table adapted from: Moxon *et al.* (2015) BMC Pregnancy and Childbirth. Supplement: Every Woman and Every Newborn

Improving the data: Testing validity and feasibility

How?

Test **VALIDITY** in **FACILITIES**:

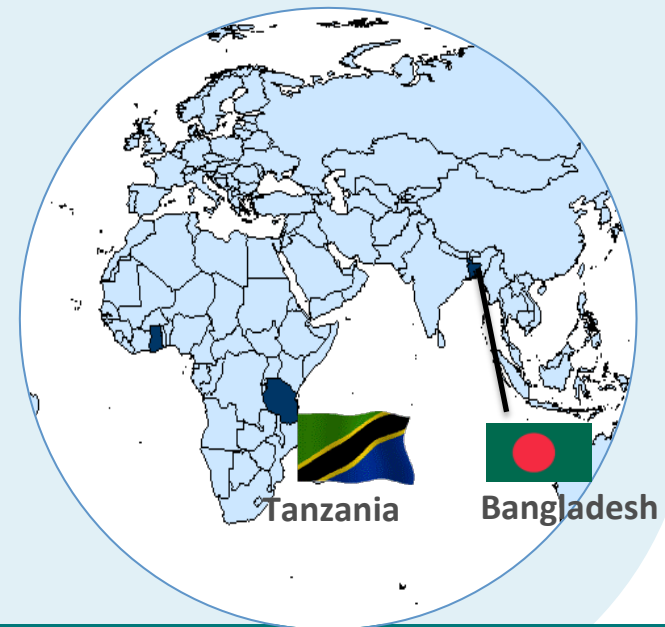
Trained observers in labour rooms and newborn wards. Compare observed “gold standard” with:

- Health worker records
- Health worker recall
- Maternal recall at time of discharge

Test **FEASIBILITY** in **HEALTH SYSTEMS**:

Few indicators then evaluated for feasibility in routine health information systems

- Specific measures of feasibility
- Data platforms for feasibility testing
- Missing data



Coordinated approach will yield the fastest progress
(aiming for testing in additional settings using joint protocols)

Improving service readiness data for small and sick newborns

Emergency Obstetric care (EmOC)	Number of facilities in area providing basic or comprehensive EmOC*	Population of area by 500000* (note recent recommendation to shift to denominator based on births not population)	Special facility based survey, or potentially from national facility based data / HMIS
Care of small and sick newborns	Definitions and measurement approach to be determined	Population to be defined (according to births)	Special facility based survey, or potentially from national facility based data / HMIS

Table adapted from: Moxon *et al.* (2015) BMC Pregnancy and Childbirth. Supplement, Every Woman and Every Newborn

*Monitoring EmOC handbook, 2009

Existing Emergency Obstetric care (EmOC) signal functions

CEmOC

Comprehensive Emergency Obstetric care



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- As per Basic Emergency Obstetric care below AND
- Perform **blood transfusion**
- Perform surgery (e.g. **caesarean section**)

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- Neonatal resuscitation

Only one signal
function
related to newborn

BEmOC

Basic Emergency Obstetric care



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- Parenteral administration of **antibiotics**
- Parenteral administration of **magnesium sulphate** for eclampsia
- Parenteral administration of **oxytocic**
- Assisted vaginal delivery
- Manual removal of placenta
- Removal of retained products of conception

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- Neonatal resuscitation

Adapted from Sharma *et al.* (2015), BMC Pregnancy & Childbirth

Candidates for Emergency newborn care signal functions

CEmNC

Comprehensive Emergency Newborn care



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• As per Basic Emergency Newborn care below AND

- Surfactant therapy
- Ventilation
- Continuous positive airway pressure
- Intravenous fluids
- Safe administration of oxygen
- Effective phototherapy?

Need to establish
signal functions
AND which
functions should be
provided at
comprehensive and
basic level

BEmNC

Basic Emergency Newborn care



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- Corticosteroids in preterm labour

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- Antibiotics for preterm or prolonged PROM to prevent infection
- Neonatal resuscitation
- Kangaroo mother care
- Alternative feeding if baby unable to breastfeed
- Injectable antibiotics for neonatal infection
- (PMTCT if HIV positive mother)

Signal functions adapted from Gabrysch *et al.* (2012). Figure adapted from Moxon *et al.* (2015), BMC Pregnancy & Childbirth

Conclusions

Improving coverage data for newborns with complications:

- Requires ambitious plan for testing of coverage indicators – validity and feasibility

Improving service readiness for small and sick newborns

- Establishing signal functions - utility and feasibility

Crosscutting issues

- Birthweight measurement
- Gestational age assessment

Objective is to improve neonatal outcomes— measurement can drive change but we can't do this without the people that collect and analyse data, and the people who deliver quality care.

