

Newborn Indicators TWG

July 10, 2013



Welcome & Meeting objectives

Overview of Newborn Indicators TWG

- Formed in 2008 in response to:
 - Growing interest in newborn health (eg, MDG4)
 - Limited data on newborn health
 - Lack of consensus on indicators to measure newborn health
 - Opportunities to collect data (eg, DHS revisions)
- Representation from multiple stakeholders
 - MICS, DHS, WHO, USAID, NGOs, etc
- Aims:
 1. Reach consensus on key indicators
 2. Advocate for inclusion in major surveys and routine health systems
- Initial areas of focus:
 - Household Surveys: Postnatal contact and content, Newborn care behaviors/ practices
 - Facility assessments: Preparedness for newborn care

Contributions to Date

- Standardization of measurement of postnatal contact
 - Collected for ALL births
 - Within 2 years of survey
 - Ask about contact for women and babies separately

➤ Comparable data on postnatal contact in DHS & MICS4
- Consensus on:
 - Indicators of newborn care behaviors/practices & postnatal care content for household surveys (optional DHS/MICS module)
 - Indicators of newborn services for health facility assessments
- MEASURE DHS's Service Provision Assessment (SPA) revised to include additional newborn information

Future Direction for TWG

- Continue to improve surveys
 - Dissemination of recommended indicators
 - Work with partners to use and test indicators
 - Online Sharing: <http://www.healthynewbornnetwork.org/page/newborn-indicators>
- **Routine health system data (eg, HMIS)**
 - **Develop recommended indicators, tools and guidance**
- Develop indicators and test metrics for key newborn interventions (as part of improving routine systems and other data collection methods as needed)
- Look for opportunities to validate indicators

Meeting Objectives

1. Review what has been done to date on inclusion of newborn health into routine monitoring systems
2. Define objectives for the subgroup with proposed scope of work, outputs and timelines
3. Agree on the approach to develop a short-list of newborn indicators for national HMIS or other routine systems
4. Identify possible indicators for inclusion in the Global Newborn Action Plan (Every Newborn)



EVERY WOMAN
EVERY CHILD

EVERY NEWBORN

AN ACTION PLAN TO END
PREVENTABLE DEATHS

xx on behalf of the Core team


Place, date






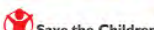


COMMITTING TO CHILD SURVIVAL
A PROMISE RENEWED




Our delivery goal




No woman
should die
while
giving life




No
newborn is
born to die



No
baby
stillborn

A LIFE FREE FROM HUNGER
Tackling child malnutrition



Save the Children
**EVERY
ONE**

No
child
stunted
or dying

~ 280,000 die

3 million die

2.6 million die

2.9 million die

10 million deaths

3.5 million within a few days of birth

3 Data-based Reasons Why Change Is Possible Now

- 1. We know the causes of newborn deaths**
- 2. We can reduce the main causes of death**
 - Newborn Survival Solutions – 3 by 2, Plus 1
- 3. We have proof of change at scale**
 - Some countries are “bending the curve” for newborn survival despite low income

1 Preterm birth



1. Preterm labor management including antenatal corticosteroids*
2. Care including Kangaroo Mother Care, **essential newborn care**

2 Birth complications (and intrapartum stillbirths)

1. Prevention with obstetric care *
2. **Essential newborn care**, and resuscitation*

3 Neonatal infections

1. Prevention, **essential newborn care** especially breastfeeding, Chlorhexidine where appropriate*
2. Case management of neonatal sepsis *

* Prioritised by the UN Commission on Life Saving Commodities for Women and Children

Plus 1: Essential Newborn Care

Why *Every Newborn*?

- **Country demand** for guidance and action, country driven
- **Large problem but huge potential for rapid change** since we know what to do and can develop clear context specific guidance on HOW
- **Harmonize** global response which so far has been slow and needs to link to many existing initiatives for reproductive, maternal, child and adolescent health care, scaling up global attention and action





Priority actions

1. **WHEN?** Focus on care during labour, birth and day after birth - the time to save lives of women, newborns, & prevent stillbirths.
2. **WHAT?** High coverage of high impact interventions for women and babies, addressing context specific and intervention specific bottlenecks.
3. **HOW?** Quality of care matters as much as coverage and requires investment, especially for effective care at birth. Skilled workers are the key to change.
4. **WHO?** Reaching every girl, every women, every newborn including the poorest, universal coverage and equity achieved.
5. **PEOPLE POWER?** Families and communities mobilising change.
6. **COUNTING?** Measurement, oversight and accountability, improve and use the data.

What is the Every Newborn Action Plan?

A roadmap for change

A platform for harmonised action by all partners

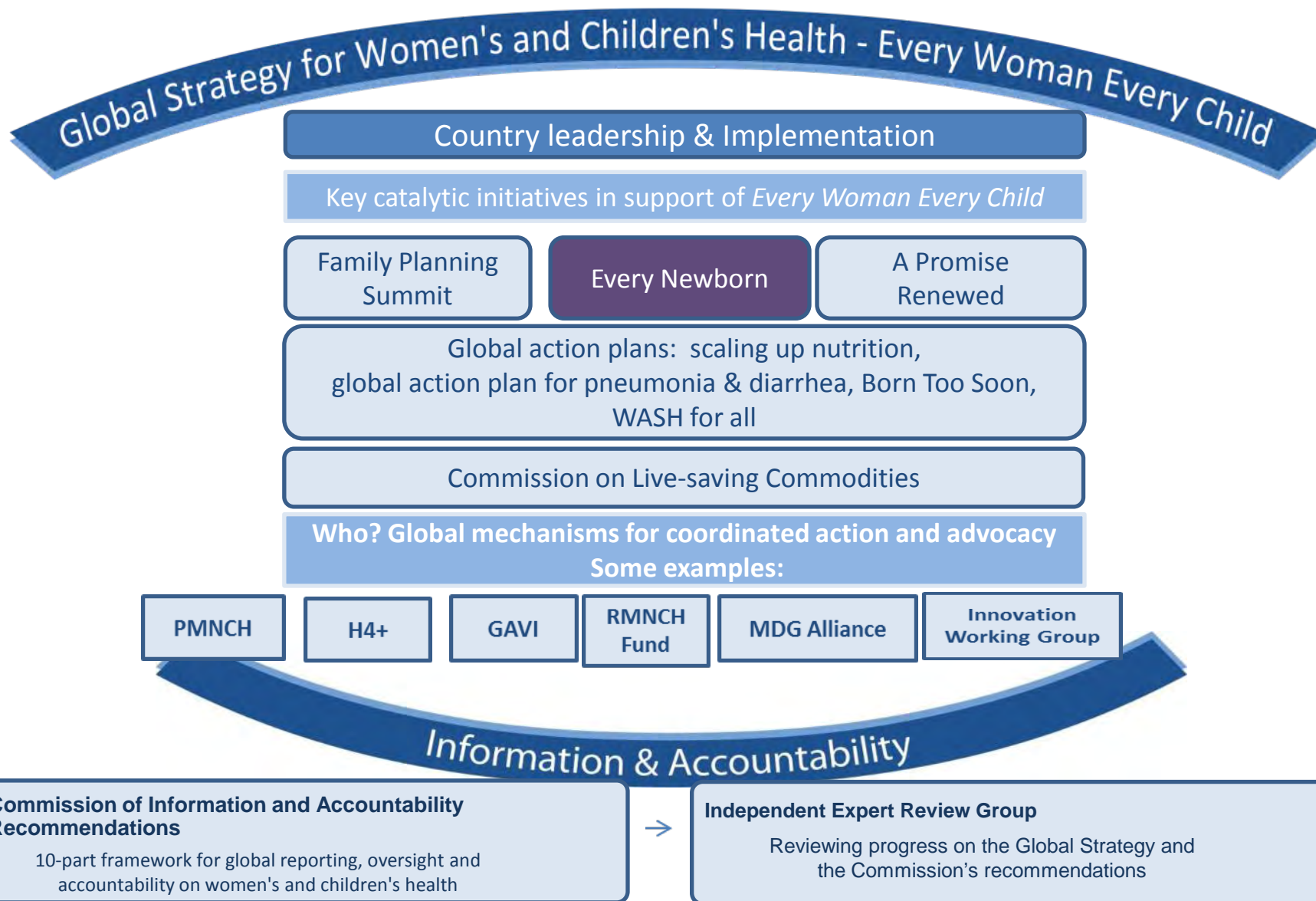
- Setting out a clear vision with mortality target, strategic directions, and innovative actions within the continuum of care
- Supported by evidence on epidemiology, effective interventions, delivery mechanisms and accelerators to progress to be published in The Lancet at the time of the launch in May 2014



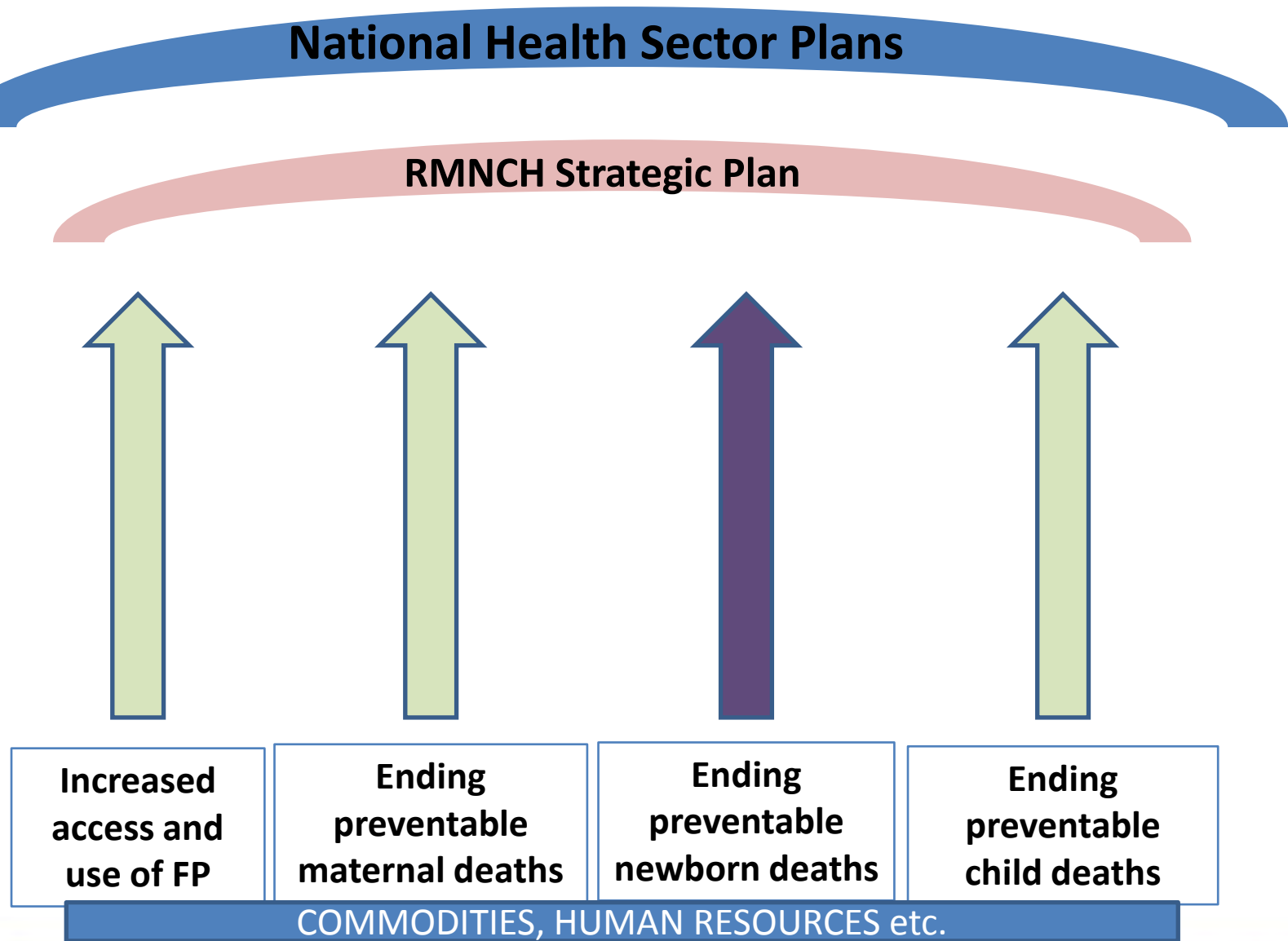


EVERY WOMAN
EVERY CHILD

Newborn action supports the Global Strategy



How It Fits Together At Country Level



Who is involved in building this movement?



- **Global plan for country action linked to *Every Woman Every Child*, and to A Promise Renewed, following *Born Too Soon* report and World Prematurity Day movement**
- **Global partnership with multiple organizations including:**
 - Country governments and parliamentarians
 - United Nations
 - NGOs
 - Universities and Professional organizations
 - Donors and foundations
 - All the PMNCH 500+ constituencies



Country consultations and global communities

Global launch May 2014 linked to the World Health Assembly

NATIONAL action by professionals, policymakers and parents = ALL OF US !!

Analyses planned

- Target setting (multiple scenarios for 2035, also working on interim targets and welcome ideas on this)
- Mortality
 - Trend analyses (U5MR and NMR and SBR) at global, regional, national level
 - Best performers and what would happen if other countries matched that rate of reduction of NMR and also more understanding of why
 - Equity analysis for mortality and coverage
 - Contribution of preterm birth and small for gestational age (*Lancet* nutrition series link)
- Morbidity and impairment, which are linked quality of MNH care (drawing on CHERG/GBD work in process and due publication in Nov 2013)
- Lives saved and cost analyses
 - How many lives could be saved with existing interventions, by cause of neonatal mortality and showing impact of same interventions on stillbirths and maternal deaths
 - Context specific (eg NMR level)
 - Costs required to reach global targets and costs per life saved
- Bottleneck analyses in about 15 high burden countries

Every Newborn Timeline

May – September 2013

- Global and regional events
- National and regional consultations

October 2013 – May 2014

- Present to the WHO Executive Board
- Finalize *Every Newborn* including production and translations

May 2014

- Launch linked to 67th World Health Assembly
- *Lancet* series (update from 2005 and giving the analyses which are the basis for the *Every Newborn*)

Online: www.globalnewbornaction.org

#NewbornActionPlan

Send your inputs! Join the action!



Implications and discussion



- **CALL TO ACTION:** want to include a short section on the importance of data into the Action Plan
- Purpose of inclusion of indicators: Track implementation and make program adjustments at multiple levels
 - Global
 - National
 - Sub-national
- Emphasis from ENAP is on crude coverage with a focus on roll-out of key interventions
 - **Opportunity:** inject need for indicators on quality and effective coverage
- Timeframe for inputs: Draft to WHO Executive Board in October
 - **Option** – provide guiding principles with indicator examples
 - **Option** – decide today on indicators that we recommend for inclusion and develop workplan to finalize list by mid-September

Our discussions and feedback are needed!

Newborn data extracted from maternity registers in 2012:

Tanzania, Uganda, Ethiopia, NE Nigeria, and Uttar Pradesh India

for the Newborn Indicators Technical Working Group, July 10 2013

Tanya Marchant



ideas.lshtm.ac.uk

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MEDICINE



Context of data extraction

- IDEAS (Informed Decisions for Action in maternal and newborn health)
 - Measurement, Learning and Evaluation grant (2010-15)
 - Funded by BMGF
 - Working in Ethiopia, NE Nigeria, Uttar Pradesh, India
- EQUIP (Expanded Quality management Using Information Power for maternal and newborn health)
 - Quality management intervention trial (2010-2014)
 - Funded by EU
 - Working in Tanzania and Uganda

IDEAS framework



BMGF theory of change



INNOVATION

Maternal & newborn healthcare is delivered in a new way

ENHANCED INTERACTIONS

between families and frontline workers

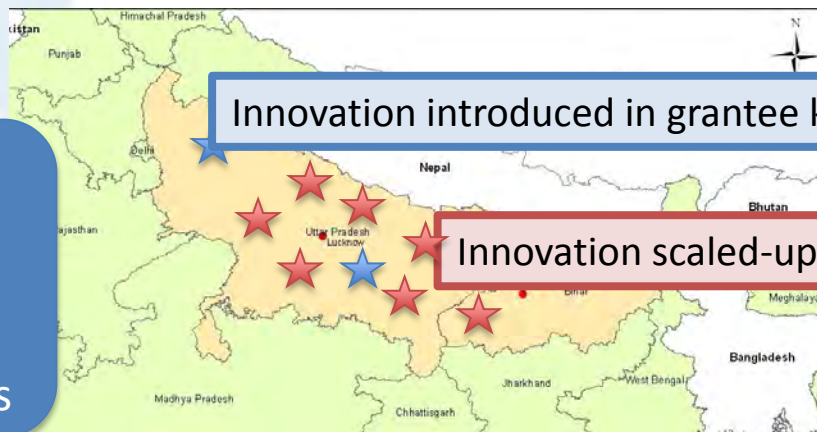
INCREASED COVERAGE

of critical interventions (practices that save lives)

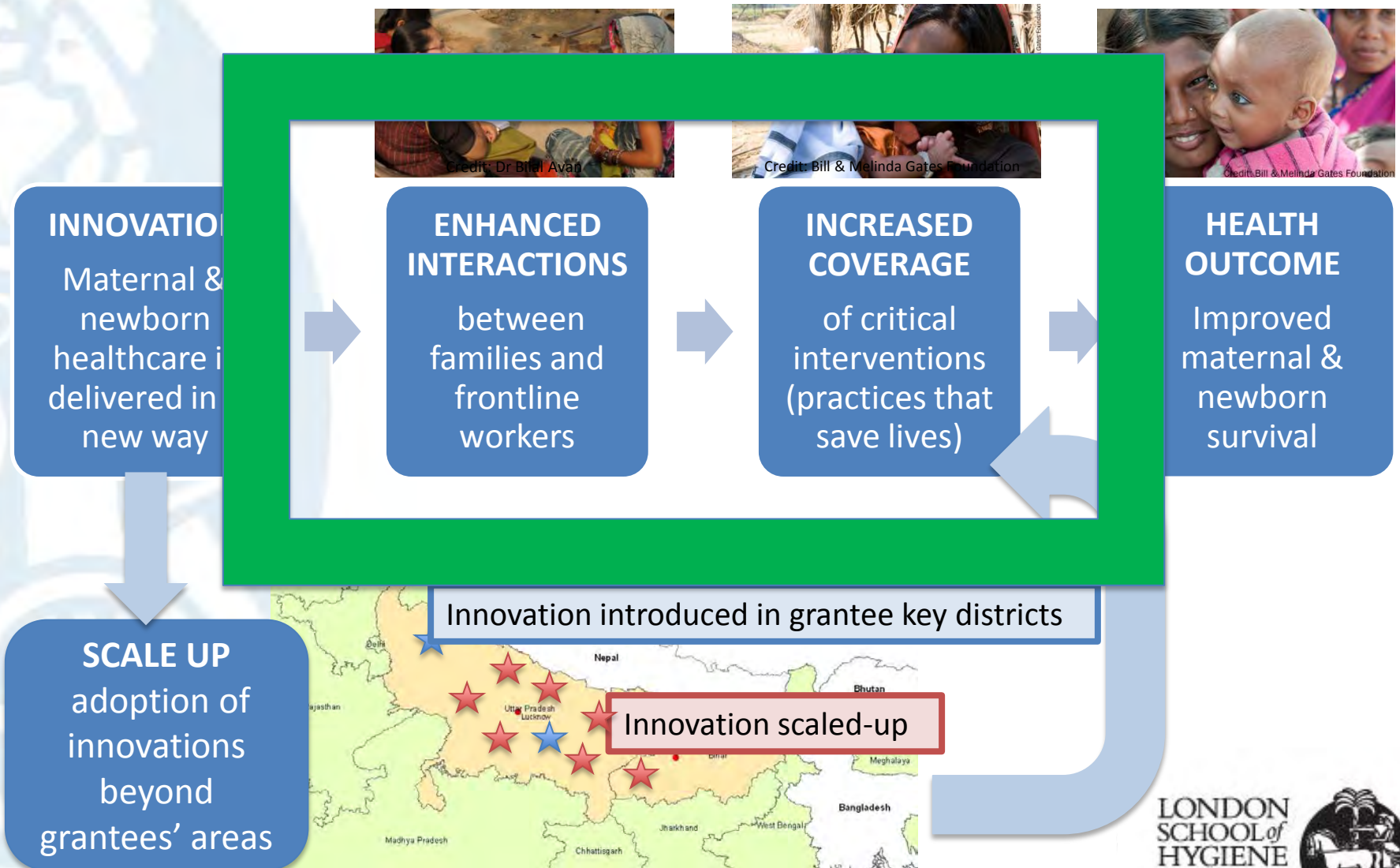
HEALTH OUTCOME

Improved maternal & newborn survival

SCALE UP
adoption of innovations beyond grantees' areas



BMGF theory of change



Study area - Uttar Pradesh, India

THIS SURVEY (Nov 2012)

80 clusters

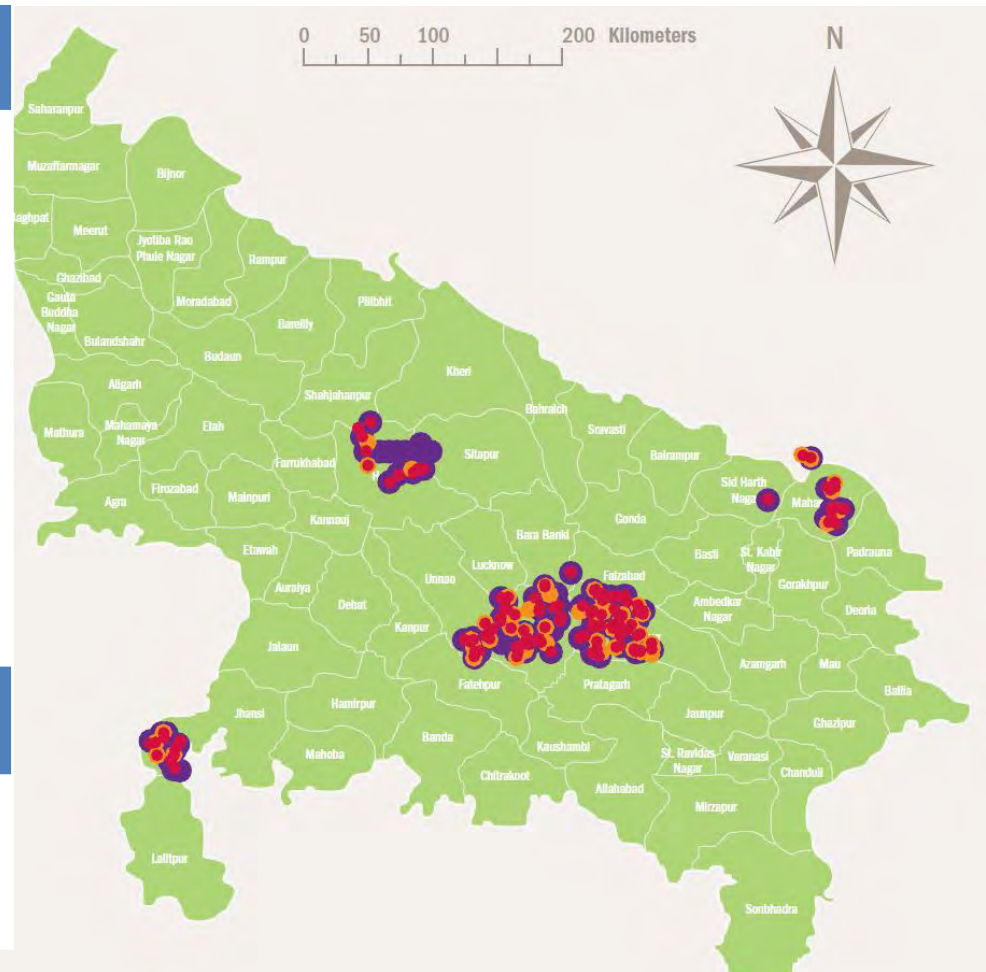
5258 households

604 women with recent birth

217 Frontline workers

60 PHC/CHC facilities

79% women delivered in a facility



Uttar Pradesh, 2010:

MMR: 440/100,000

NMR: 45/1,000

Study area – Gombe State, Nigeria

THIS SURVEY (June 2012)

40 clusters

1868 households

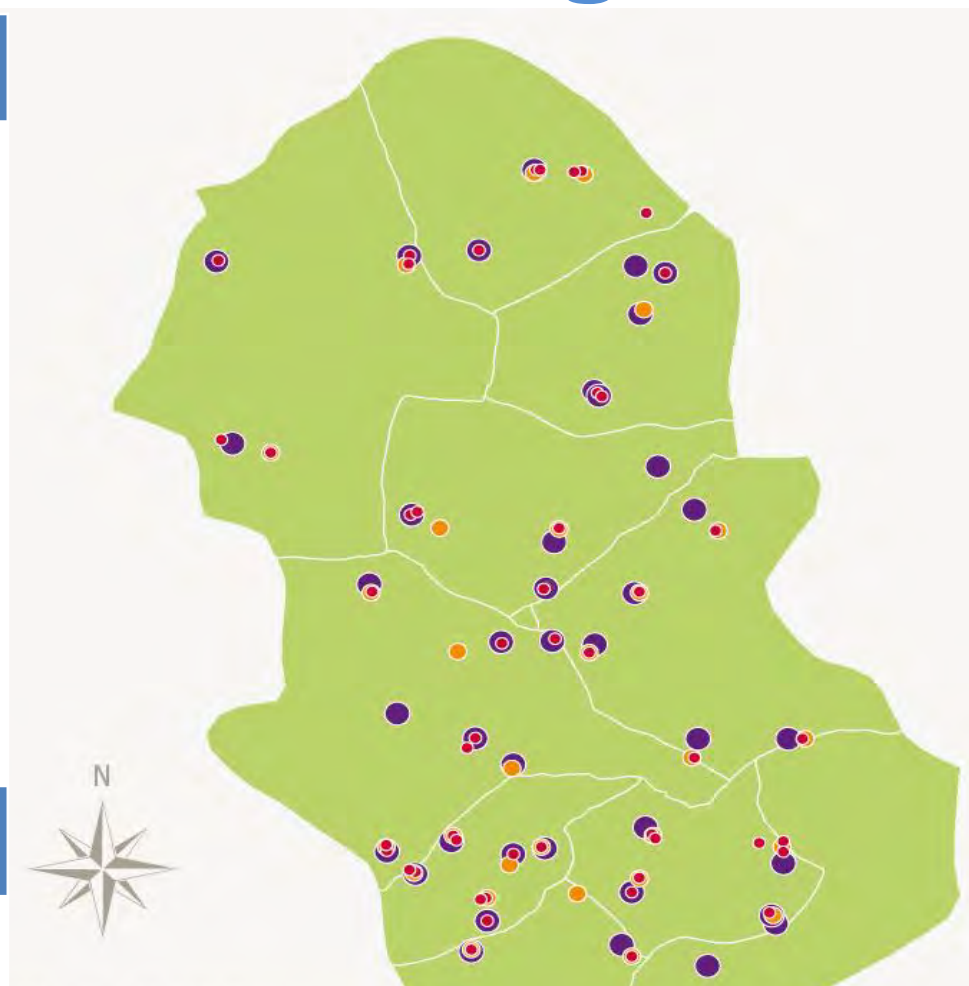
349 women with recent birth

61 Frontline workers

25 Primary health facilities

4 Hospitals

30% of women delivered in a facility



Nigeria, 2010:

MMR: 840/100,000

NMR: 39/1,000

Study area – Ethiopia

THIS SURVEY (June 2012)

80 clusters

4294 households

533 women with recent birth

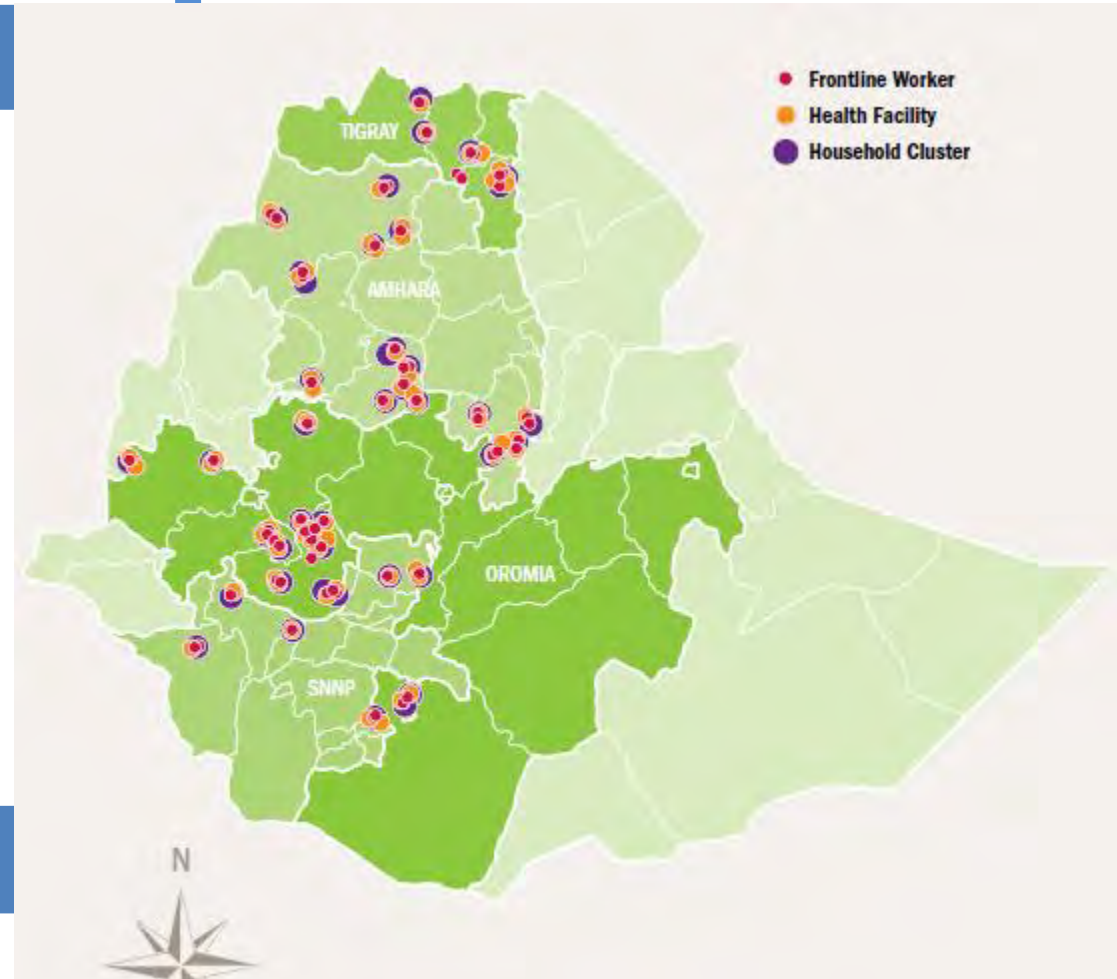
316 frontline workers

81 Primary health facilities

74 health posts

5 hospitals

15% of women delivered in a facility



Ethiopia, 2010:

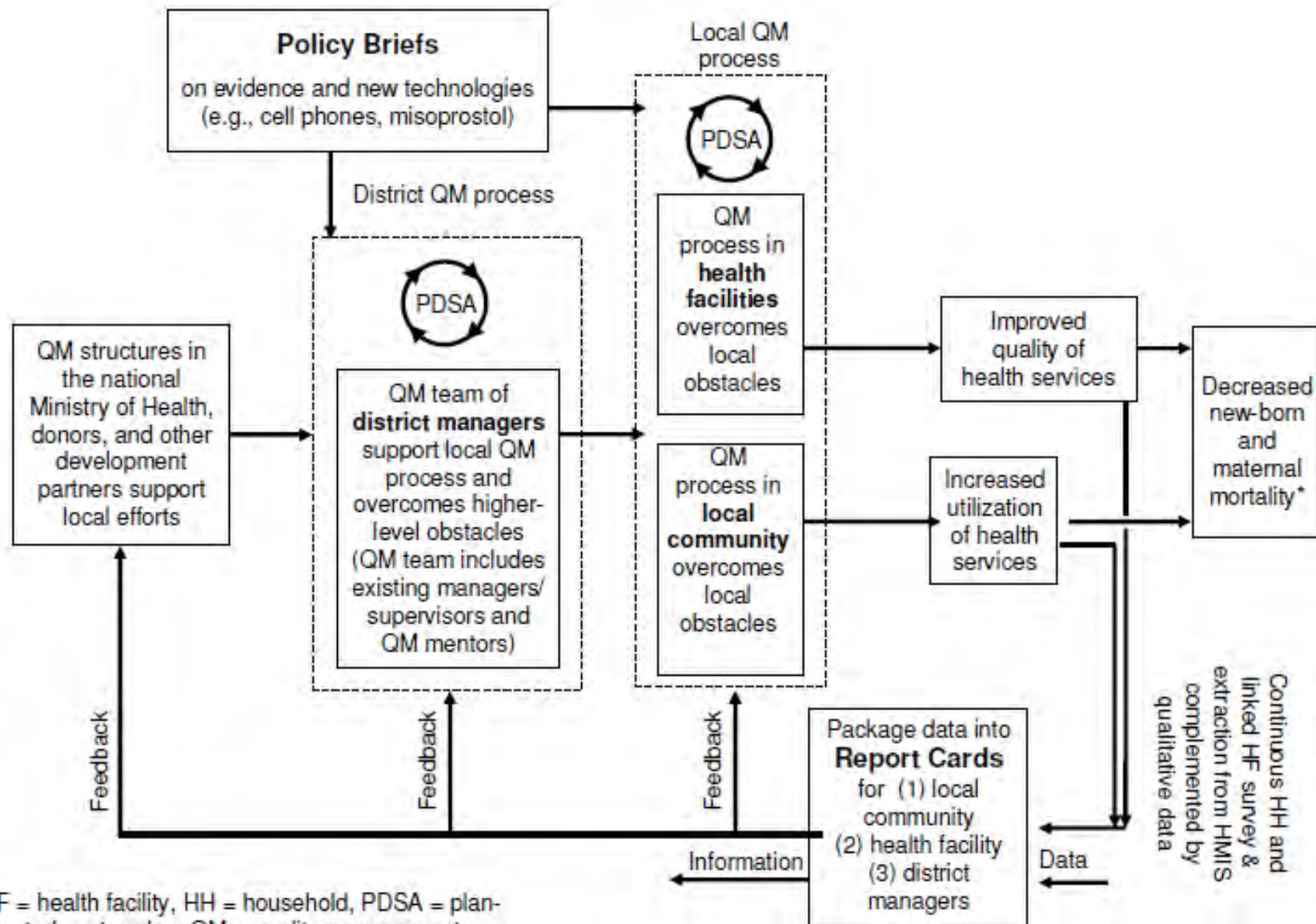
MMR: 470/100,000

NMR: 35/1,000

EQUIP framework

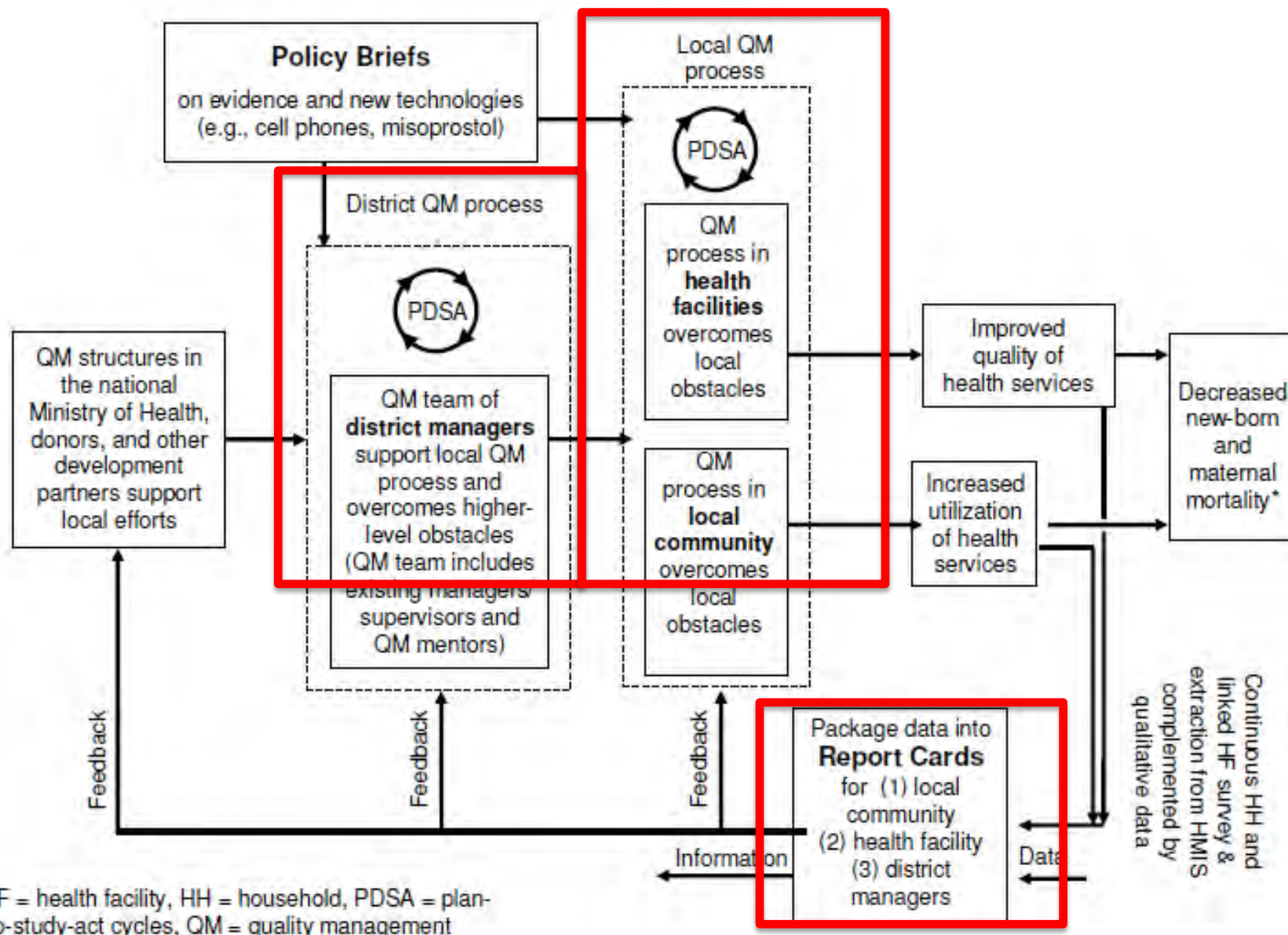


EQUIP framework



HF = health facility, HH = household, PDSA = plan-do-study-act cycles, QM = quality management

EQUIP framework: core elements



EQUIP continuous survey + report cards



EQUIP continuous survey + report cards

- In both comparison and intervention districts, for the purpose of QM intervention and for evaluation, for 30 months, EQUIP:
 - Samples 10 household clusters (30 HHs/cluster) with PPS from the entire district each month
 - Census of all health facilities in each district every 4 months
 - ‘Last event’ interviews at each health facility
- Continuous Data collection organised in 4-month ‘rounds’
 - adequate sample size to measure primary population indicators
 - 6 ‘rounds’ to be completed in total
- Data synthesised into report cards for use by QM teams



Two commonalities in design



Linking data sources from households, facilities and frontline workers

- Households
 - Structured interview with all household heads in selected clusters. Also interview all women aged 13-49 with a special module for women who had a live birth in last 12 months
- Facilities
 - In facilities serving household clusters, facility readiness survey and extract routine data from maternity registers
 - Referral level facility for routine data extraction from maternity registers
- Front line health workers
 - Structured interviews with frontline health workers



**IDEAS and
EQUIP both
extract data
from maternity
registers and
record
information on
PDAs at point of
extraction**



Reference periods (2011-12)

Country	Data extraction period	Calendar time reference
Tanzania	4 months retrospective * 3	1 st July 2011 – 30 th Sept 2012
Uganda	4 months retrospective * 3	1 st July 2011 – 30 th Sept 2012
Ethiopia	6 months retrospective * 1	1 st Nov 2011 – 30 th April 2012
NE Nigeria	6 month retrospective * 1	1 st Dec 2011 – 31 st May 2012
Uttar Pradesh	6 months retrospective * 1	1 st May 2011 – 30 th Oct 2012



Results

1. Numbers
2. Maternal deaths
3. Stillbirths
4. Low birth weight
5. 5-minute apgar scores
6. Newborn admissions

1. Maternity register data extracted: number of facilities, number of births

Country	N Facilities	N Births	N Live births
Tanzania	159 (53*3)	8,235	8,178
Uganda	180 (60*3)	7,232	7,103
Ethiopia	155	8,404	8,094
NE Nigeria	29	3,790	3,387
Uttar Pradesh	61	22,235	21,690



2. Maternal deaths

Country	N Deaths	N Births		Other data estimates*
Tanzania	8	8,235	97/100,000	790/100,000
Uganda	7	7,232	97/100,000	430/100,000
Ethiopia	46	8,404	547/100,000	470/100,000
NE Nigeria	57	3,790	1,504/100,000	840/100,000
Uttar Pradesh	5	22,235	23/100,000	440/100,000



*State of the World's Midwifery 2011



IDEAS
Evidence to improve
maternal & newborn health

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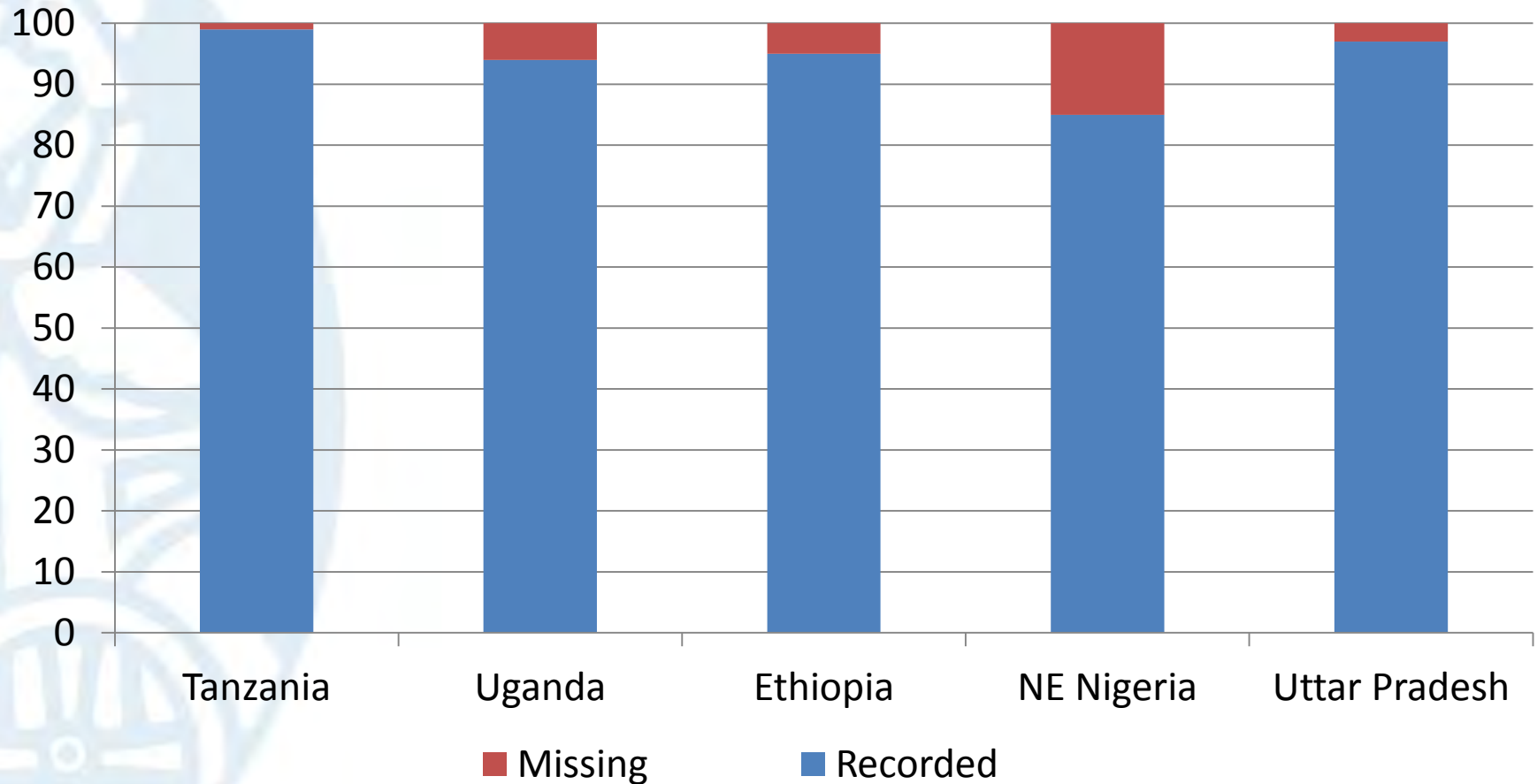
3. Stillbirths

Country	N Deaths	N Births		Other data estimates*
Tanzania	142	8,235	17/1,000	26/1,000
Uganda	112	7,232	16/1,000	25/1,000
Ethiopia	365	8,404	43/1,000	26/1,000
NE Nigeria	268	3,790	71/1,000	42/1,000
Uttar Pradesh	544	22,235	25/1,000	22/1,000

*Cousens et al, Lancet 2011



4. Low birth weight – facility completeness



4. Low birth weight estimates

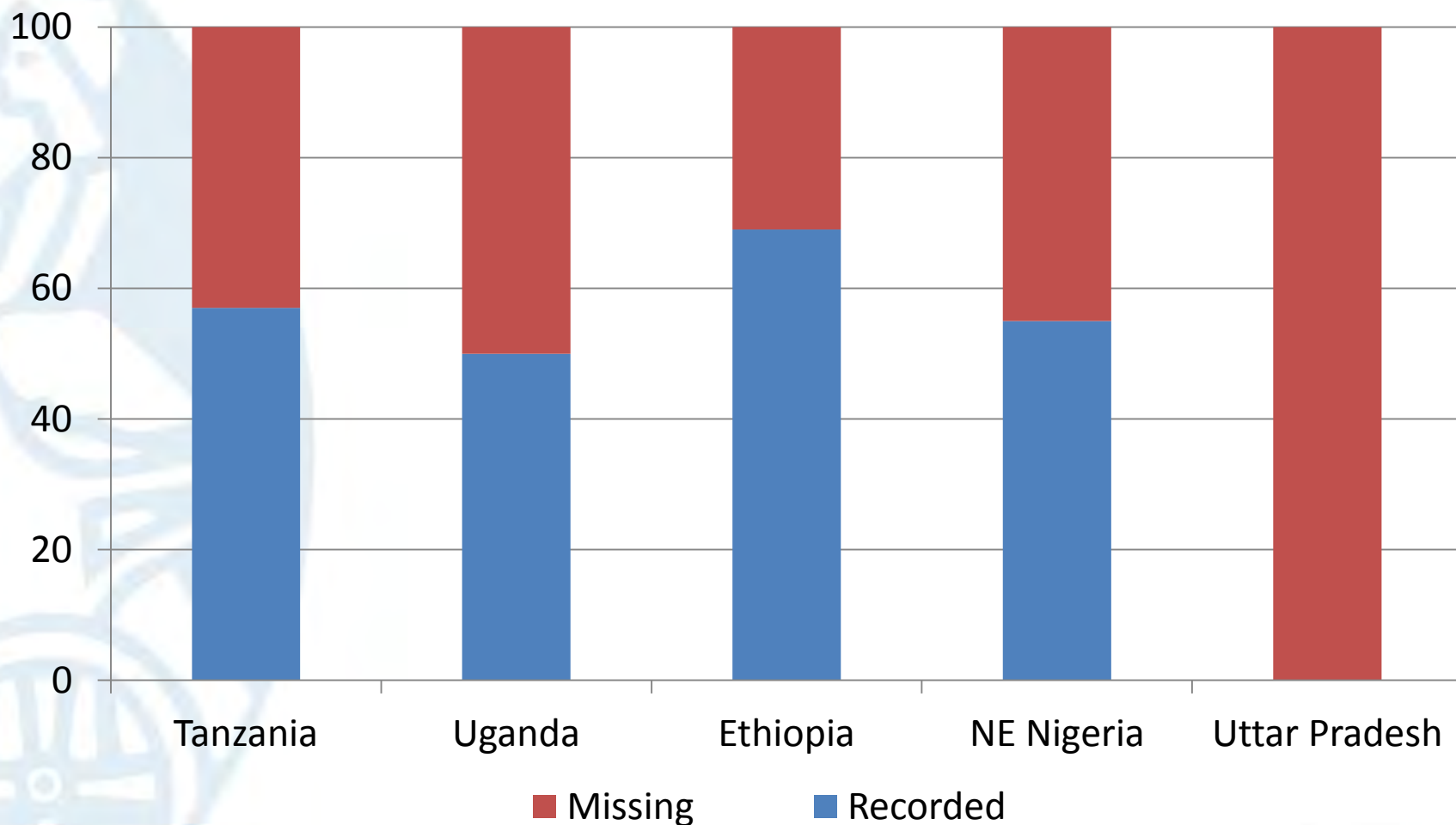
Country	N <2500g	N Recorded	%	Other data estimates*
Tanzania	340	8,144	4%	19% (DHS 99)
Uganda	254	6,679	4%	12% (DHS 00)
Ethiopia	428	7674	6%	15% (DHS 00)
NE Nigeria	138	2,890	5%	14% (DHS 03)
Uttar Pradesh	2,145	21,056	10%	30% (DHS 99)



*Low birth weight regional
and country estimates 2004



5. Apgar scores – facility completeness



5. Apgar score<7 (5 minute)

Country	N scored <7	N Scored	%	Other data estimates*
Tanzania	98	4,630	2%	27% (HBB)
Uganda	160	6,591	2%	
Ethiopia	1099	5,569	20%	
NE Nigeria	29	1,856	2%	
Uttar Pradesh	Not recorded			



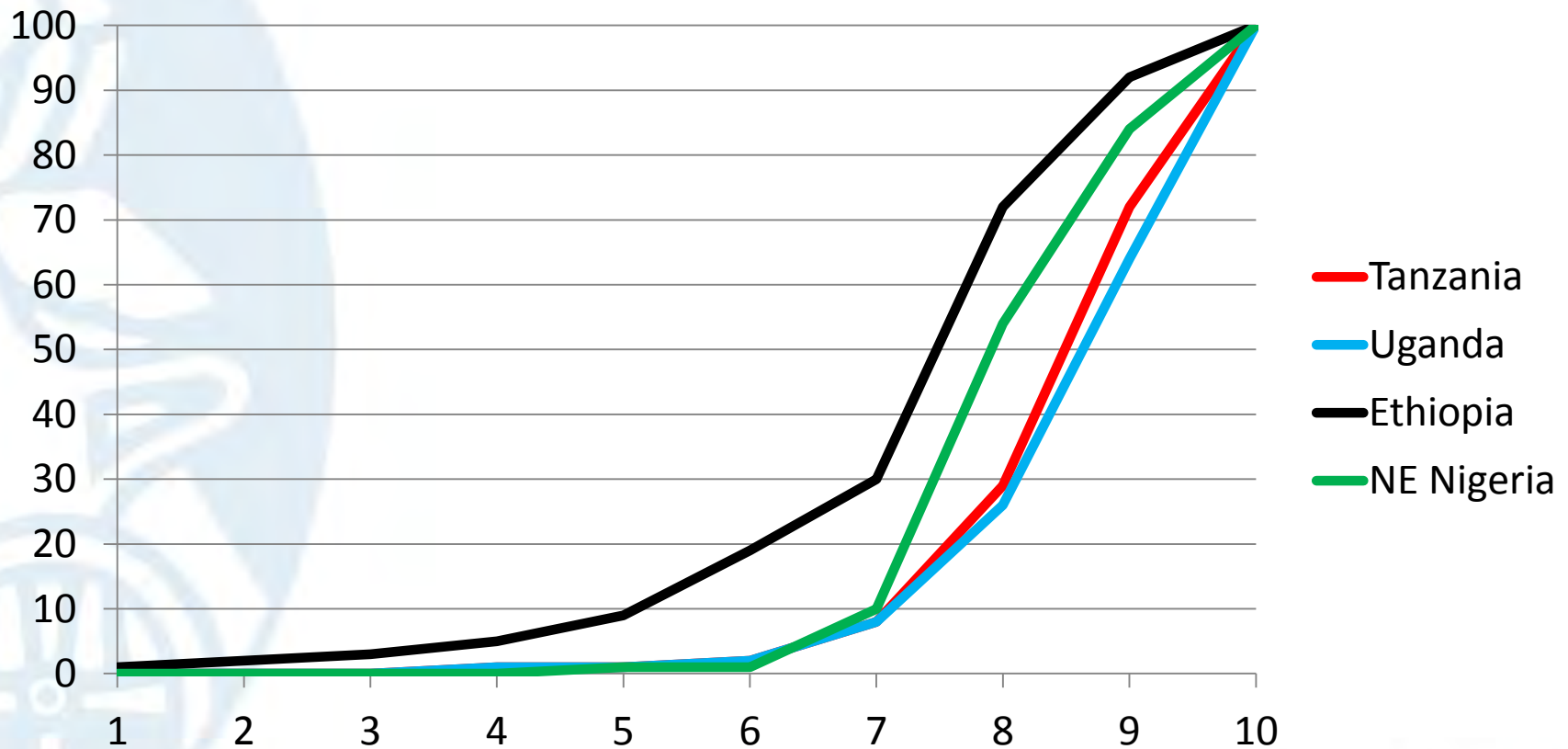
*Msemo et al Pediatrics 2012



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5. Apgar score patterns – cumulative frequency



6. Admissions in facilities

Country	N admitted	N Live births	%	Other data estimates*
Tanzania	1	8,178	0.1%	X
Uganda	55	7,103	0.8%	X
Ethiopia	391	8,094	4.8%	X
NE Nigeria	8	3,387	0.2%	X
Uttar Pradesh	12	21,690	0.1%	X



Summary

- Useful to extract raw data from maternity registers to examine reporting at local levels, but limited interpretation possible
- Even where facility delivery is highly prevalent, estimates do not approximate population level estimates
- Considerable underreporting of maternal deaths
 - Higher number of deaths reported in Ethiopia and NE Nigeria
- LBW appears to have high completion within facilities, but mainly dichotomous, indicating whether newborn LBW or not
- APGAR scores less complete, and staff find lower scores (indicative of birth asphyxia) difficult to estimate



Next steps

- IDEAS
 - Continuing to engage in-country
 - Disseminating findings in-country and internationally
 - Website: ideas.lshtm.ac.uk
 - Newsletter sign up: eepurl.com/j3iBz
 - Twitter: [@LSHTM_IDEAS](https://twitter.com/LSHTM_IDEAS)
 - Integrating existing findings within broader MLE programme
 - New primary data collection planned for 2014
- EQUIP
 - Continuous survey continues until April 2014
 - Report cards continue to be synthesised for QM teams
 - Data to be analysed for effect of intervention during Q3 2014

- Thank you



Strengthening routine monitoring systems

An overview of WHO's work to increase accountability

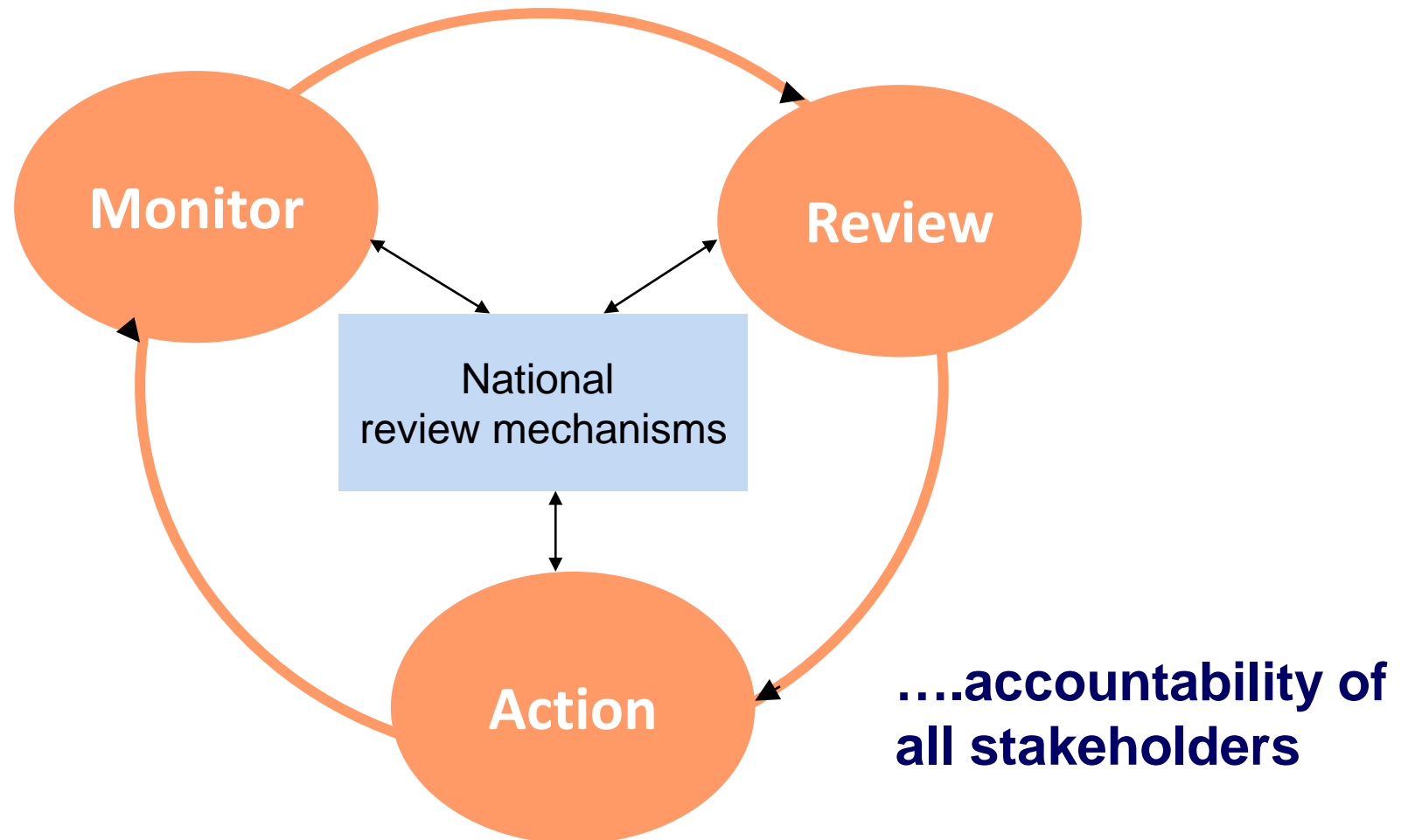


**World Health
Organization**

Increased demand for information & accountability at country and global levels

- **Country uses:** Improve management of health services, inform health sector reviews, assess progress and performance
- **Meet global reporting requirements:** MDGs, UNGASS, WHO disease programmes
- **Respond to grant-related (performance based) funding:** Global Fund, GAVI, World Bank, PEPFAR and more – disease specific grants
- **Evaluation:** how what works best as part of scaling-up multiple interventions and programmes

What do we mean by accountability?



From recommendations to actions

COMMISSION RECOMMENDATIONS

1. Vital events (CRVS)
2. Health indicators & equity

3. Innovation

4. Resource tracking
5. Country Compacts
6. Reaching Women/Children

7. National oversight

8. Transparency

9. Reporting aid for
Women/
Children's health

10. Global Oversight

Country Actions

Monitoring of results

Birth and death registration

Maternal death surveillance & response

eHealth & innovation

Monitoring country resources

Concluding compacts

Advocacy and action

Global Actions

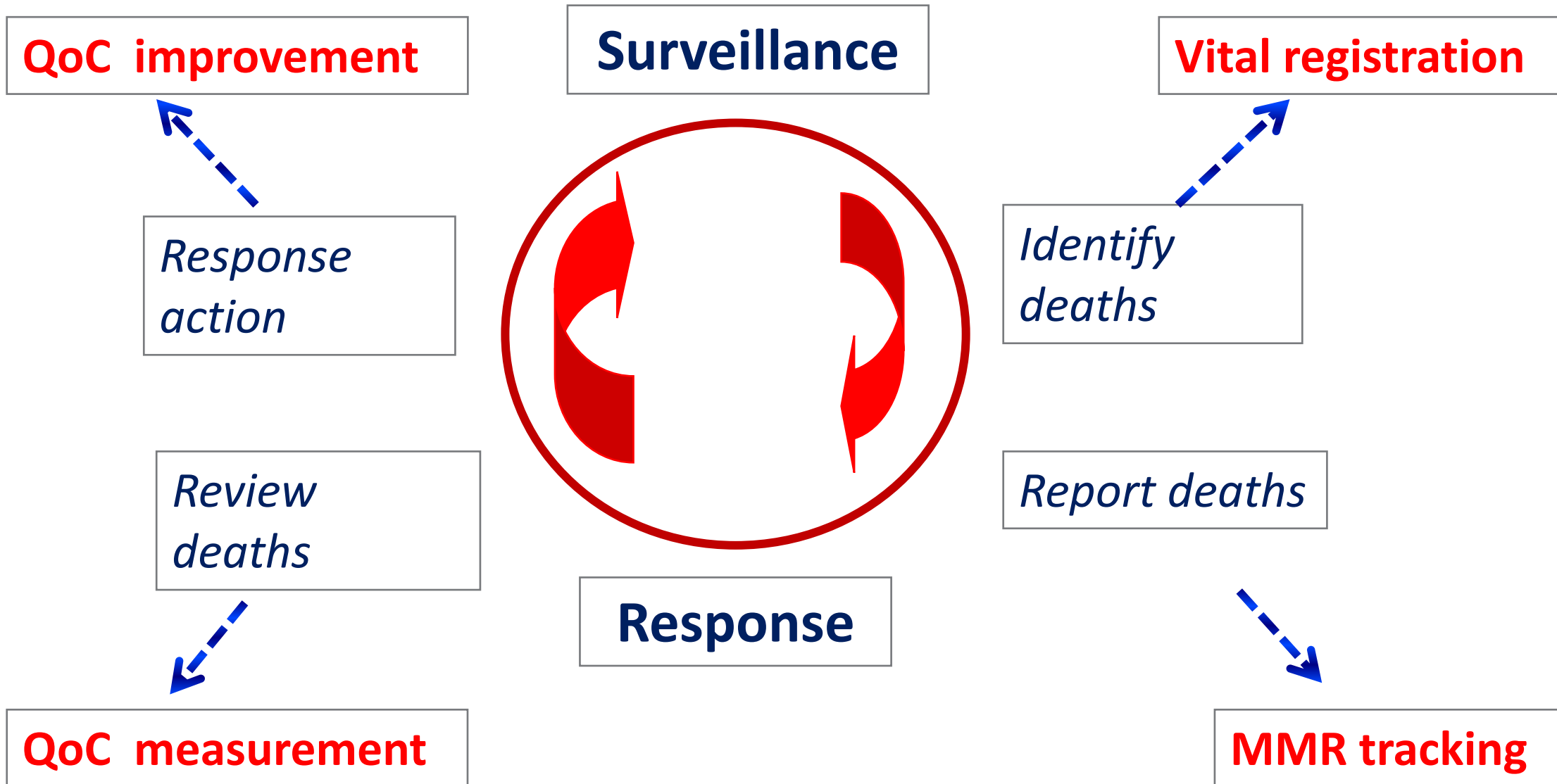
Monitoring results

Tracking resources

Global review (iERG)



MDSR - relationship to the CoIA recommendations

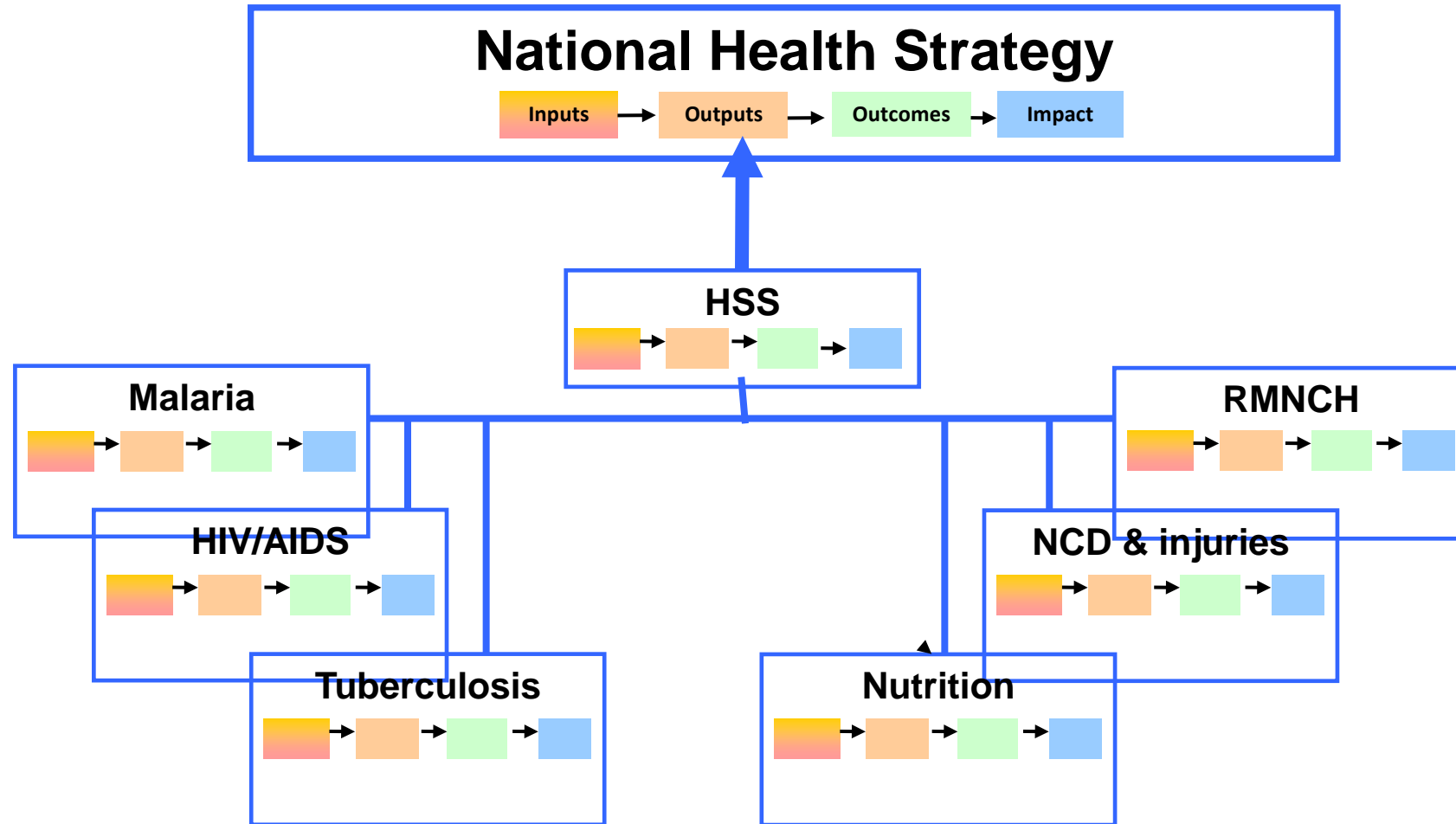


Strategic priorities for WHO: Building country capacity in M&E

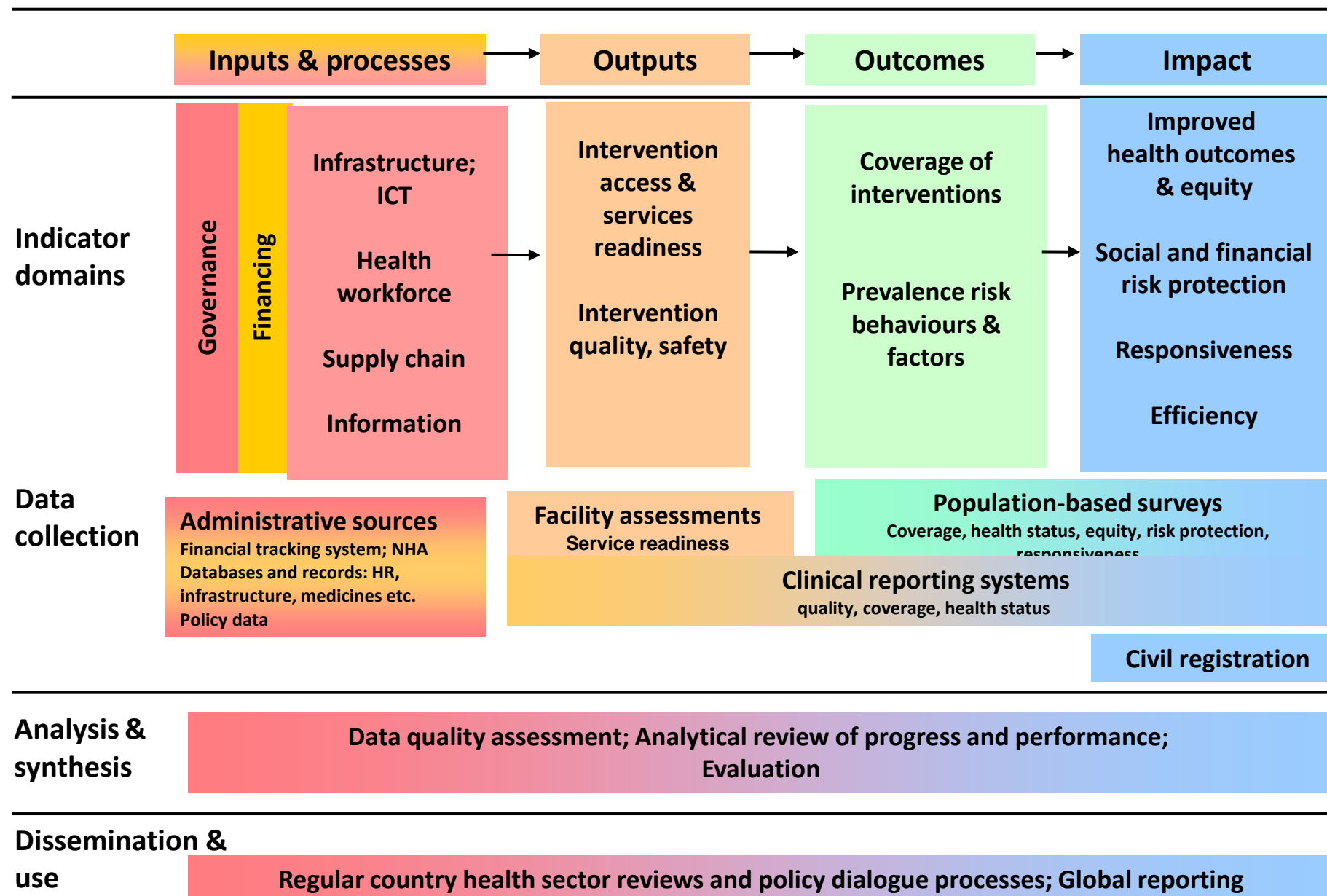
1. Strengthening M&E plans for national health strategies ;
2. Addressing data gaps/strengthening data sources
 - ✓ Improving the quality of the health facility data (HMIS) through application of WHO standards on data quality (annual data quality report card and facility data verification survey);
 - ✓ Facilitating the introduction of web-based reporting systems such as DHIS 2.0 through development of guidelines and standards for core indicators;
 - ✓ Sound monitoring of basic health inputs, including facilities, services (SARA), human resources and financial resources
 - ✓ Strengthening birth and death registration systems, with reliable cause of death; strengthen cause of death reporting
3. Building analytical capacity for health in country institutions
4. Strengthening analytical reviews of progress and performance
5. Improving accessibility and transparency of data through national health observatories



Aligning programme specific M&E to NHP



Monitoring, Evaluation, Review of National Health Strategies



Monitoring, evaluation and review of national health plans

KEY ISSUES/HIGHLIGHTS

- M&E plans exist but generally more work is required to strengthen links/harmonise with programme specific M&E plans
- Most plans do not address analytical capacity building, strengthening data sources and review mechanisms

TOOLS/GUIDANCE

- IHP+/WHO Guidance for strengthening country led platform for monitoring, reviewing the implementation of the national health strategy. Used to strengthen existing/develop new M&E plan – can be used in conjunction with JANS

PRIORITIES/NEXT STEPS

- Develop/finalize/improve M&E plans (*RO/IST/CO*)
- Finalize guidance on compendium of WHO core indicators for monitoring national health plan & universal health coverage (*HQ/RO*)

Strengthening routine facility reporting: developing core indicators

COMMON ISSUES/HIGHLIGHTS

- District health information system (DHIS 2.0) software system for health management information systems to facilitate data entry, transfer, validation, reporting and mapping
- Open source – free software system supported by HISP network
- DHIS is on the uptake in many countries (Sierra Leone, Uganda, DRC, Zimbabwe – in progress) and increasingly supported/funded by donors such as Global Fund & Pefar but these efforts are not linked with new information needs

PRIORITIES/NEXT STEPS

- Develop guidance on standard indicators and reports including quarterly and annual statistical reports and analyses for routine facility data (*HQ/RO*)

Assessing data quality: WHO Health Facility Data Quality Report

KEY ISSUES/HIGHLIGHTS

- Data quality of health facility data can be of dubious quality
- Plethora of data quality tools applied vertically with no linkages. Need to establish clear linkages with other data quality tools
- Careful assessment of situation on ground should guide the selection of tools

TOOLS/GUIDELINES

- Annual objective assessment of quality of facility data, based on a combination of a desk review using a cross cutting excel tool that looks at several dimensions of data quality and a data verification survey module.

PRIORITIES/NEXT STEPS

- Harmonizing tools with Global Fund and GAVI
- Identify appropriate independent entities (either within the government or other institutions outside the government) to assess data quality and support improvements to data quality (HQ/RO/IST/CO/GAVI/GF)

Monitoring service availability and readiness: Service Availability and Readiness Assessment (SARA)

COMMON ISSUES/HIGHLIGHTS

- Service delivery data a big gap in many countries and technical and analytical capacity generally weak
- Need to ensure use of SARA results in annual operational planning, resource allocation, policy reform

TOOLS/GUIDELINES

- Annual system of monitoring of service availability and readiness (service delivery) – with analyses of minimum service standards

PRIORITIES/NEXT STEPS

- Establish network of technical expertise at regional and national institutional level to support SARA/Data Quality/Analysis process (HQ/RO/IST/CO/GAVI/GF)
- Establish calendar of SARA surveys with countries (*RO/IST/CO*)

Rapid Assessment of national civil registration and vital statistics systems and AnaCOD

COMMON ISSUES/HIGHLIGHTS

- Birth and death registration weak across all countries (lack of capacity and coordination between all stakeholders)
- Assessments not yet been implemented
- Report on cause of death is almost non existent

TOOLS/GUIDELINES

- CRVS rapid assessment tool: to assess birth and death, cause of death registration as basis for development of a comprehensive plan for improving quality and use of birth, death, cause of death data
- AnaCOD: to assess/analyze of quality of mortality data and cause of data

PRIORITIES/NEXT STEPS

- Undertake a rapid assessment and develop plan(*Countries with RO /IST technical assistance*)
- Capacity building in ICD10 to strengthen hospital reporting (*RO/IST/CO*)
- Integrate use of AnaCOD to assess mortality data for health performance report (*countries*)
- Given the multi-sectoral nature of CRVS, it is important to identify steps that the MOH can do to advance the CRVS agenda. Develop a simple guide for MOH on their role in CRVS.



Analytical reviews of progress and performance

KEY ISSUES/HIGHLIGHTS

- Analytical capacity building is generally weak. Most reports do not address stepwise analysis, equity and efficiency analyses.
- Need to measure progress of national health plan (compared to targets, peers, different data sources), equity, stepwise analysis, efficiency, estimates & benchmarking)

PRIORITIES/NEXT STEPS

- Develop guidance on preparing and developing an annual review report of progress and performance (*HQ/RO/IST/CO + partners*)
- Establish network of technical expertise at regional and national institutional level to support SARA/Data Quality/Analysis process (HQ/RO/IST/CO/GAVI/GF)

National Health Observatory and country policy dialogue process

COMMON ISSUES/HIGHLIGHTS

- There are regular health sector reviews in most countries but improvements can be made when it comes to inclusiveness of the stakeholder community and critical questioning of health sector actions
- The capacity to generate evidence and translate it to policy is generally low in countries
- NHO is a data repository/data warehouse and a platform for analyses and production of analytical country profiles
- Most countries have requested national data repository /observatory to support the accountability agenda

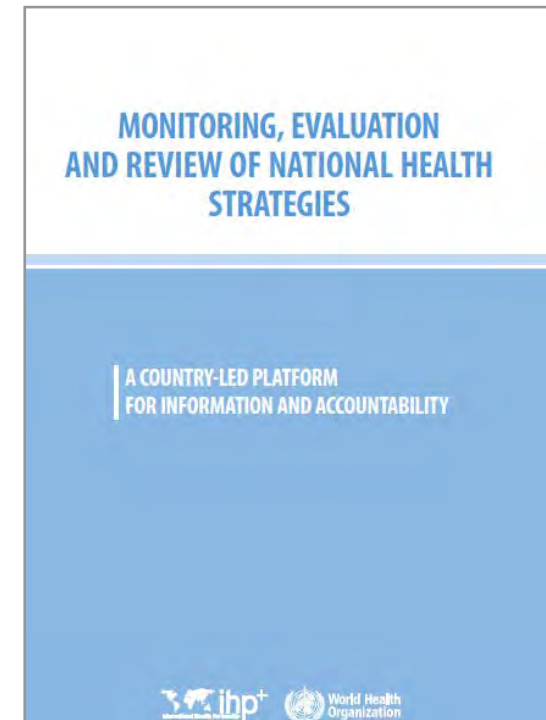
TECHNICAL ASSISTANCE NEEDS/NEXT STEPS

- Clarify respective roles of CHPP and NHO and to harmonise IT platforms.
- Implement comprehensive package of tools (M&E analyses, SARA NHO, preparation of reviews) in selected countries (*All*)
- Integrate DHIS & NHO data repository in countries (*RO/IST/COs*)



Linking accountability with existing country planning processes and other related partner initiatives

- Over recent years, working with partners to strengthen country monitoring, evaluation and review of national health strategies :
 - IHP+ = Harmonising donor funding commitments around one country-led national health plan
 - Joint Assessment of National Strategies (JANS) – M&E component prominent
 - One common monitoring and evaluation framework
 - Guidance for country led M&E and review of national health strategies
- Joint partner workplan 2010-11 with GAVI Global Fund, World Bank on M&E platform approach
- Commission on Information and Accountability for Women and Children's Health : country accountability roadmaps for strengthening M&E builds on these initiatives and approaches



THANK YOU





USAID
FROM THE AMERICAN PEOPLE



Maternal and Child Health
Integrated Program

Scope, methods, and results of MCHIP review of MNH related data collected through routine monitoring systems

Preliminary Analysis

10 July 2013

Vikas Dwivedi, MCHIP

Mary Drake, MCHIP

Molly Strachan, MCHIP

Barbara Rawlins, MCHIP

Kirsten Unfried, MCHIP



PURPOSE, SCOPE & METHOD

MNH HMIS Review

Purpose of this Review:

- To better understand what information on MNH service content, quality and health outcomes is currently included in national HMIS for select priority countries.
- **Specific objectives include:**
 - Document current MNH (ANC/L&D) indicators included in the HMIS
 - Document current MIP indicators in PMI focus countries
 - Identify gaps and Advocate at the national level for incorporation of new indicators on content and quality of MNH services where
 - Provide recommendations to WHO on MIP-related indicators and data collection formats

Method

- Focus on ANC, delivery and immediate post-natal care
- Collected HMIS tools from 14 countries
- Content Analysis of:
 - Client record, Register, facility monthly/quarterly summary forms, commodity stock-out
- Used standardized data abstraction template
- Guidance/documents for completing tools

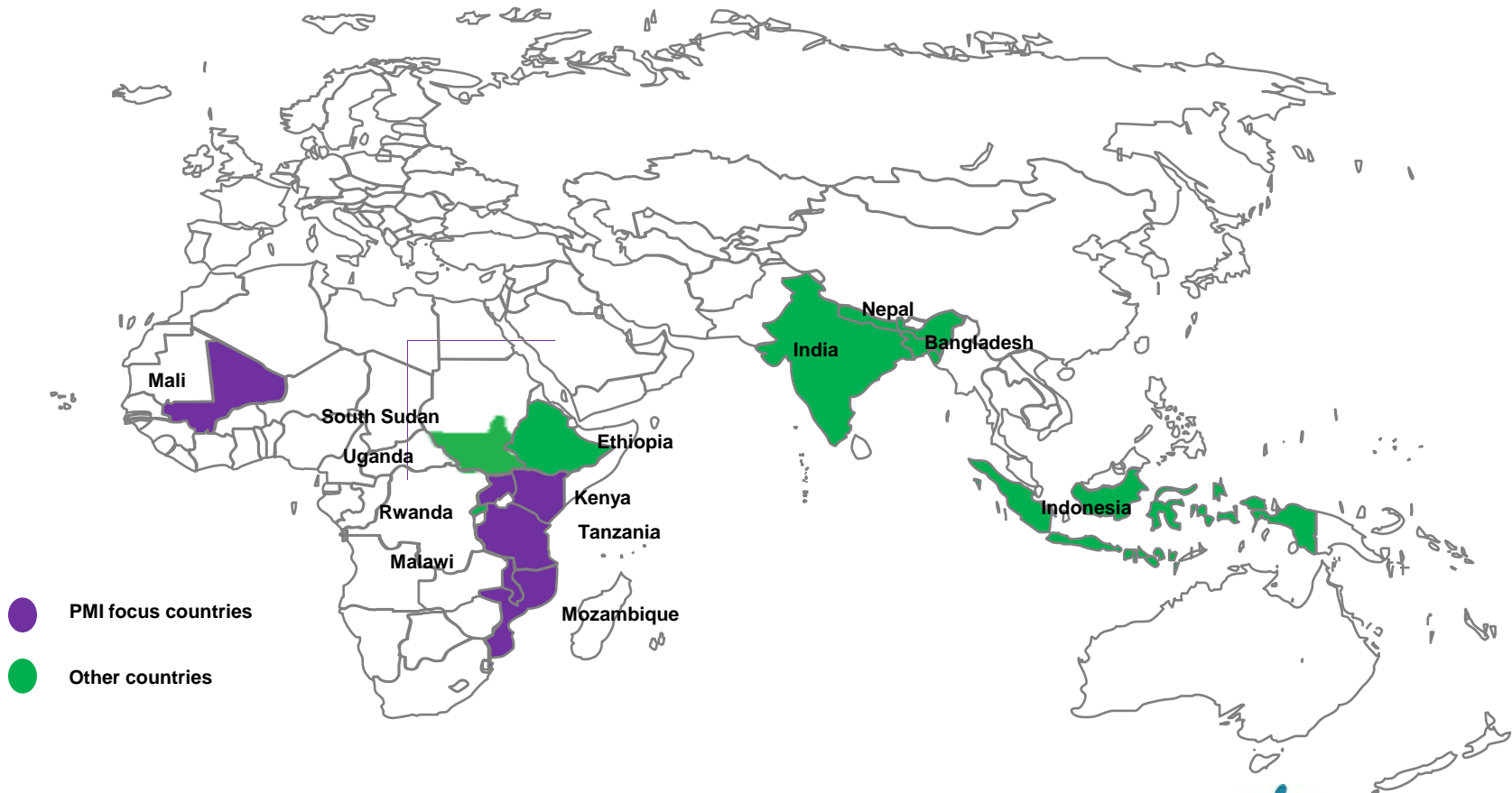
Methods (Cont.)

- For PMI focus (6) countries
 - Review of national policy documents, M&E plans, and grey literature on MIP
 - Identify key stakeholder in PMI focus countries
 - Conduct In-depth interviews on use of MIP-related data
 - National MOH staff (RH and NMNCP)
 - Health care providers
- Overall report and country specific case studies for PMI

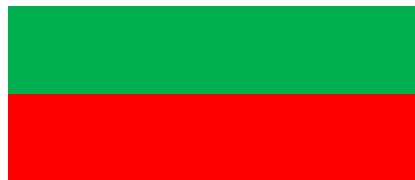
Countries Included in the HMIS Review

MIP Focus - Malawi, Mali, Uganda, Mozambique, Tanzania, Kenya

Others – India, Nigeria, South Sudan, Bangladesh, Nepal, Ethiopia, Rwanda & Indonesia



RESULTS



Included in the HMIS MSF

Not Included in the HMIS MSF

Indicators for ANC including MIP

- ANC visit 1
- ANC visit 4
- TT given
- Deworming medication given
- Iron/folate given
- Syphilis test
- Syphilis test results
- Syphilis treatment
- IPTp given (by dose)
- ITN given
- Malaria test result recorded
- Malaria Treatment Given/ Referral
- HIV test result - Pregnant women

Indicators in MSF at Health Facility

- Antenatal Care (1)

	No. of Pregnant Women:						
Country	ANC visit 1	ANC visit 4	TT given	Deworming medication	Iron/folate	Syphilis results	Treatment for Syphilis
Bangladesh							
India							
Nepal							
Ethiopia							
Kenya							
Malawi							
Mali							
Mozambique							
Nigeria							
Rwanda							
South Sudan							
Tanzania							
Uganda							

Indicators in MSF at Health Facility

- Antenatal Care (2)

	No. of Pregnant women			
Country	IPTp	Malaria test result	Treatment for Malaria / Referral at ANC	HIV test result
Bangladesh				
India				
Nepal				
Ethiopia				
Kenya				
Malawi				
Mali				
Mozambique		**	**	
Nigeria				
Rwanda				
South Sudan				
Tanzania				
Uganda				

Indicators for Delivery

- Place of delivery
- Skilled attendant
- Cesarean Delivery
- Normal Delivery
- Other method of Delivery
- Completed Partograph
- Duration of Labor (>12 hours)
- Fetal heart rate (above or below a threshold)
- Uterotonic in the 3rd stage of labor
- Maternal complications
- Maternal complications - treated
- Referral for maternal/delivery complication

Indicators in MSF at Health Facility

- Delivery (1)

Country	No. of deliveries:				
	Place of delivery	Skilled attendant	Cesarean Delivery	Normal Delivery	Other method of Delivery
Bangladesh					
India					
Nepal					
Ethiopia					
Kenya					
Malawi					
Mali					
Mozambique					
Nigeria					
Rwanda					
South Sudan					
Tanzania					
Uganda					

Indicators in MSF at Health Facility

- Delivery (2)

Country	No. of deliveries:						
	Completed Partograph	Duration of Labor (>12 hours)	Fetal heart rate (above or below a threshold)	Uterotonic in the 3rd stage of labor	Maternal complications	Maternal complications - treated	Referral for maternal/delivery complication
Bangladesh							
India							
Nepal							
Ethiopia							
Kenya							
Malawi							
Mali							
Mozambique							
Nigeria							
Rwanda							
South Sudan							
Tanzania							
Uganda							

Indicators for Newborn

- Stillbirths
- Stillbirths: Fresh
- Stillbirths: Macerated
- Early newborn deaths (death before discharge)
- Early newborn deaths by cause
- Breastfeeding within one hour
- Complications
 - LBW
 - Sepsis
 - Preterm
 - Asphyxia
 - Tetanus
 - Other
- Treated
- Referral
- Skin-to-skin

Indicators in MSF at Health Facility - Newborn (1)

Country	No. of cases of:					
	Stillbirths	Stillbirths: Fresh	Stillbirths: Macerated	Early newborn deaths (death before discharge)	Early newborn deaths by cause	Breastfeeding within one hour
Bangladesh						
India						
Nepal						
Ethiopia						
Kenya						
Malawi						
Mali						
Mozambique						
Nigeria						
Rwanda						
South Sudan						
Tanzania						
Uganda						

Indicators in MSF at Health Facility - Newborn (2)

Country	No. of cases of										
	Newborn Complications	Treated	LBW	Sepsis	Preterm	Asphyxia	Tetanus	Other	Referral	Skin-to-skin	Resuscitation
Bangladesh											
India											
Nepal											
Ethiopia											
Kenya											
Malawi											
Mali											
Mozambique											
Nigeria											
Rwanda											
South Sudan											
Tanzania											
Uganda											

Indicators in MSF at Health Facility - Newborn (2)

Country	No. of cases of										
	Newborn Complications	Treated	LBW	Sepsis	Preterm	Asphyxia	Tetanus	Other	Referral	Skin-to-skin	Resuscitation
Bangladesh											
India											
Nepal											
Ethiopia											
Kenya											
Malawi											
Mali											
Mozambique											
Nigeria											
Rwanda											
South Sudan											
Tanzania											
Uganda											

General Observations

- Variability in data capturing
 - Some forms record # of IFA tablets given
 - Some forms record if woman was given IFA
 - Recording for Maternal and newborn complications in L&D not standardized
 - Malaria case management during pregnancy
 - Limited indicators on routine newborn care
- For some forms no clear instructions or job aids on capturing and analysis of HMIS data

General Observations (Cont.)

- Lack of information on quality and content of delivery services. A little more information available for ANC
- Critical life-saving interventions, such as Newborn Resuscitation, are not being measured across countries

Opportunities

- Advise countries to adapt HMIS to include routine tracking of uterotonic in third stage for PPH prevention
- Ensure inclusion of indicators for case management in M&E guide for Malaria in Pregnancy
- Continued participation in NH Indicator Technical Working Group
- Work with countries like Kenya planning to revise national HMIS

Next Steps

- Finalize the review and analysis
- Disseminate findings
- Advocate at global and country level on inclusion of indicators measuring content and quality of MNH services

Thank you!

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Newborn Indicators TWG

July 10, 2013



What is collected on newborn services in routine data collection systems

Deb Sitrin & Tanya Guenther
Saving Newborn Lives

Background

What we've heard about:

- Newborn related data collected through routine systems
- Currently, data collected mostly on OUTCOMES

This presentation focuses on:

- High-impact newborn interventions (KMC, asphyxia management, infection management)
 - Important to adequately capture in routine data collection systems since that's the **ONLY** way to reliably measure them
 - Potential to guide local planning, decision-making, and quality improvement
- Routine postnatal care
 - Important to document what services newborns receive to help prevent illness or identify cases needing intervention

Purpose and Scope

Purpose:

- Review recommended indicators from program implementation guides (KMC, HBB) & assess availability of required data in routine systems
- Document what data are collected through routine systems on:
 - KMC
 - Asphyxia management
 - Infection management for newborns
 - Routine postnatal care

Scope:

- Facility level data collection systems in 4 countries (Malawi, Uganda, Nepal and Bangladesh) + findings from 4 country KMC evaluation
- Current review does not include individual or family-level cards, community level forms and reports, supervision checklists

KMC Indicators:

Implementation guide recommendations

Output indicators

- Number of health providers trained in KMC, by cadre
- **Proportion of facilities with in-patient capacity where KMC is operational**, by level of facility and type of KMC service
- Proportion of targeted facilities with in-patient capacity where KMC is operational, by level of facility and type of KMC service

Outcome indicators

- Proportion of LBW babies who received KMC in catchment area of the KMC facility(ies)
- **Proportion of LBW babies who received KMC and survived to discharge from facility**, by birth weight category
- Proportion of LBW babies who received KMC who were lost to follow-up after discharge

+ 5 supplemental indicators (2 output, 3 outcome)

Indicators in **Bold** refer to suggested HMIS indicators

Source: MCHIP Kangaroo Mother Care Implementation Guide, 2012.

Kangaroo Mother Care Implementation Guide



Save the Children®

KMC: What's currently collected

Current situation

- Proportion of facilities with in-patient capacity where KMC is operational:
 - Data availability: No database of KMC facilities, information collected from implementing partners, not generally collected by MOH;
 - Data quality: how to assess 'operational'?
- Proportion of LBW babies who received KMC and survived to discharge & *Proportion of LBW babies who received KMC (TWG preferred):*
 - Data availability: Inconsistent – may be captured in project or improvised registers, or patient charts, passports, etc. Not all registers record survival to discharge.
 - Data quality: Evaluation found missing data with not all LBW babies or those initiating KMC recorded; often standard to discharge babies <2500g
 - Denominator issues: most programs only admit babies for KMC that are <2000 or sometimes even 1800g)

Asphyxia/HBB indicators:

Implementation guide recommendations

Output indicators

- Number and percent of trainers trained by type of cadre and district
- Number and percent of birth attendants trained by type of cadre and district
- Number and percent of health facilities equipped with resuscitation devices by district

Outcome indicators

- Number and percent of babies not breathing at birth who were resuscitated successfully
- Number and percent resuscitated successfully by key HBB action step
 - Crying (stimulation)
 - Clearing the airway/stimulation
 - Ventilation with bag and mask



Source: HBB Implementation Guide, 2012.

Asphyxia management: What's currently collected

Current situation

- HBB Output indicators: Need to be collected from various implementing partners, not generally collected by MOH
- HBB Outcome indicators: Not typically included in routine data systems (collected through HBB project registers)
 - Information may be collected on # asphyxia cases but issues with definitions and disconnect between registers and reports
- Note: HBB countries collect different project indicators

Next steps

- HBB M&E working group will review experiences in countries and recommend indicators that have proven to be useful for programming and feasible to incorporate into routine monitoring systems

Management of newborn infections

Current situation

- No global recommendations on routine or HMIS indicators for management of newborn infections
- Countries have little reporting on newborn illnesses or treatment (with exceptions)
- Even if data collected, there are gaps:
 - Capture of cases: # cases of illness may be recorded at facilities BUT inconsistent where recorded (outpatient register, maternity register, PNC register, etc) and may not be aggregated in reports
 - Care initiation: Initiation of treatment (what medicine given) may be recorded BUT open-ended fields difficult to tally and likely produce inconsistent data
 - Completion of treatment: No recording or reporting % completing full course of treatment

Routine postnatal care for newborns

Current situation

- No global recommendations on routine or HMIS indicators for routine postnatal care for newborns
- Some countries don't have postnatal registers, so little or no information captured on routine postnatal care
- If PNC register exists:
 - PNC for baby may not be reported
 - Timing of PNC may not be recorded or reported
 - Complications/Diagnoses often recorded with open-ended fields so difficult to tally or get consistent data

Summary

- Few recommendations on what should be collected in routine systems on services or interventions provided to newborns
 - Even if indicators recommended, not currently collected
- Variability across countries
- Only a fraction of recorded data are reported by facilities, and even less analyzed and communicated in bulletins/reports
- Guidance for recording is weak and key terms not defined
- Open-ended format in registers likely more prone to lack of standardization and ambiguity; difficult to tally
- Notable disconnects between what is recorded and what is reported
- There are other newer interventions that should be captured – e.g. chlorhexidine and antenatal steroids

Limitations

- Data quality and completeness not assessed
- Use of data not assessed but likely low given the limited emphasis on summary and reporting of newborn data
- Some forms not in English
- Despite conversations with country staff, some forms may not be the versions currently in use

Thank-you!

KMC: What's currently collected

Recommended indicators	Status within routine data systems based on 4 country KMC evaluation (Malawi, Uganda, Mali, Rwanda)	
	Data availability	Data quality
Proportion of facilities with in-patient capacity where KMC is operational* (TWG recommended capture by dist managers <u>outside</u> HMIS)	No database of KMC facilities, info gathered from partners	Some facilities identified as having KMC might not be 'operational'
Proportion of LBW babies who received KMC and survived to discharge from facility	Project or improvised KMC registers, some record elsewhere (passports, individual files, etc) Unknown if all registers record survival to discharge	Evaluation found missing data, not all LBW or KMC babies recorded <u>Definition issue:</u> Often standard to discharge babies discharged <2500g
Proportion of LBW babies who received KMC (Indicator preferred by TWG)	Project or improvised KMC registers, some record elsewhere	Missing data <u>Denominator issue:</u> <2500g or <2000g? or other? Possible to adjust denominator

*Operational – Facilities that routinely practice continuous skin-to-skin and breastfeeding (or appropriate feeding) for babies who are LBW (<2500g) on admission to facility

Asphyxia: What's currently collected

Country	What is recorded	What is reported by facilities	What is in MOH bulletins/reports	Availability & quality issues
Malawi	<u>Maternity register:</u> Apgar score (5 min) Circle <u>one</u> leading complication <ul style="list-style-type: none"> • None • Weight less than 2500g • Prematurity • Asphyxia • Sepsis • Other 	# newborns treated for complications	# and % of newborns treated for complications (out of expected deliveries)	<ul style="list-style-type: none"> • Probably underestimate complications, including asphyxia • Assumes complications are managed/treated • No definitions for asphyxia
Uganda	<u>Maternity register:</u> <ul style="list-style-type: none"> • Apgar score (1 and 5 minute) 	# of birth asphyxia	# of cases of birth asphyxia	Unclear how birth asphyxia defined or source of numbers in report
Nepal	<u>Maternity register:</u> <ul style="list-style-type: none"> • 'Newborn resuscitation (ambu-bag)' (open-ended) <u>Delivery register for HP/Home:</u> <ul style="list-style-type: none"> • Newborn complication (open-ended) 	<i>In Nepali</i>	None	Unclear how birth resuscitation defined
Bangladesh	<ul style="list-style-type: none"> • <i>In Bangla</i> 	<ul style="list-style-type: none"> • # of birth asphyxia cases • # of birth asphyxia deaths 	# deaths due to birth asphyxia	Unclear how birth asphyxia defined

Newborn infections: what's currently collected (1)

Country	What is recorded	What is reported by facilities	What is in MOH bulletins/reports	Comments
Malawi	<u>Maternal register captures:</u> <ul style="list-style-type: none"> Sepsis, if the leading complication at birth 	None	None	<ul style="list-style-type: none"> Unclear definition of sepsis # cases not reported Treatment and referral not captured Note: First level facilities in Malawi only give first dose and refer
Uganda	<u>PNC register captures:</u> <ul style="list-style-type: none"> Diagnosis (open-ended) Other treatment (open-ended) Referral status (1=young child clinic; 2=HIV chronic, 3=other) 	Monthly report includes: <ul style="list-style-type: none"> # cases of neonatal septicemia # perinatal conditions (0-7 days) # neonatal conditions (8-28 days) 	None	<ul style="list-style-type: none"> Unclear where data on newborn infections/conditions derived from # cases not in report Treatment not reported

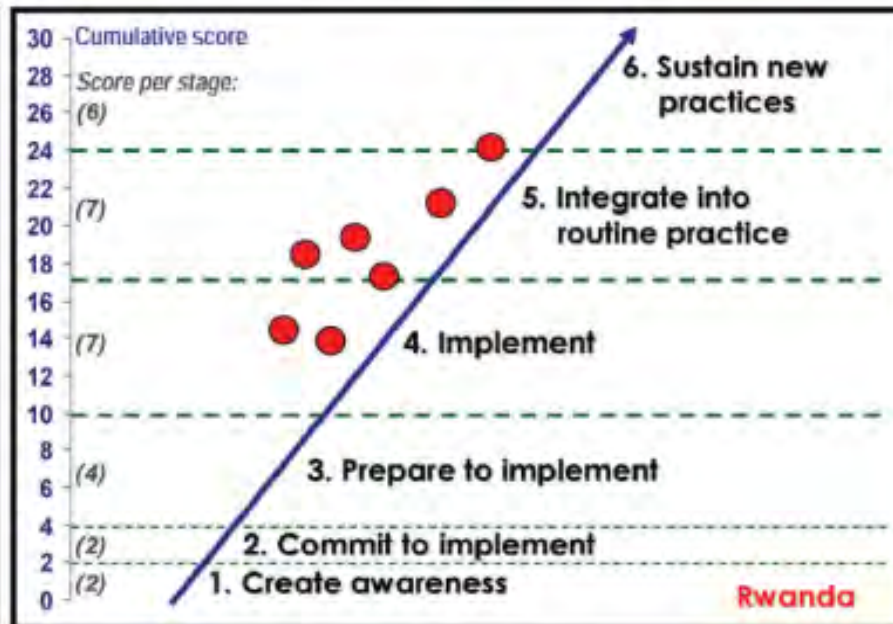
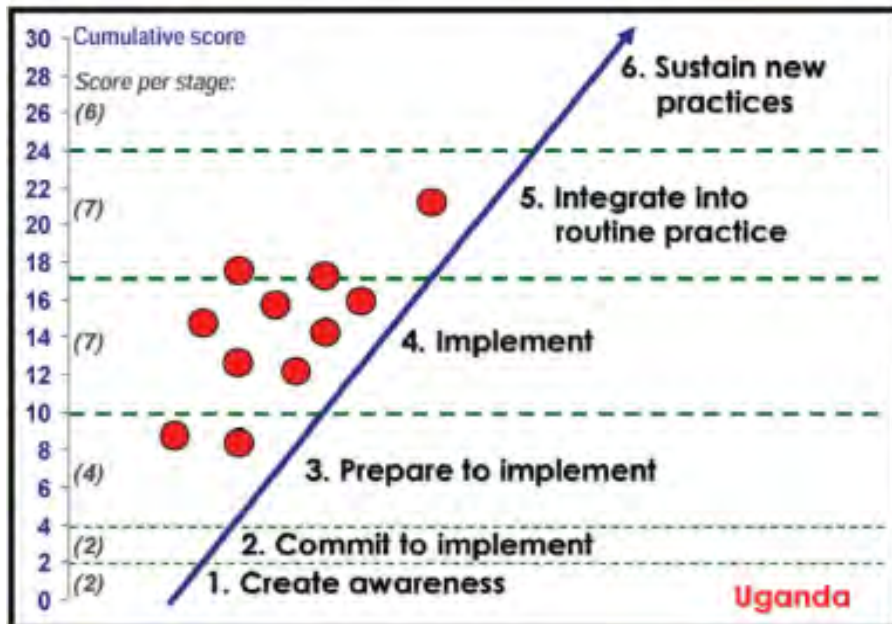
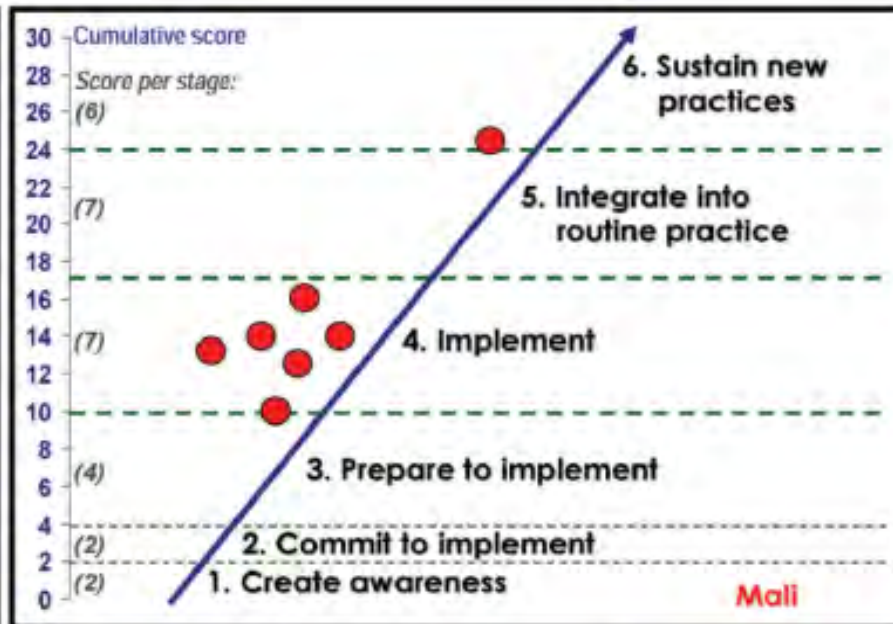
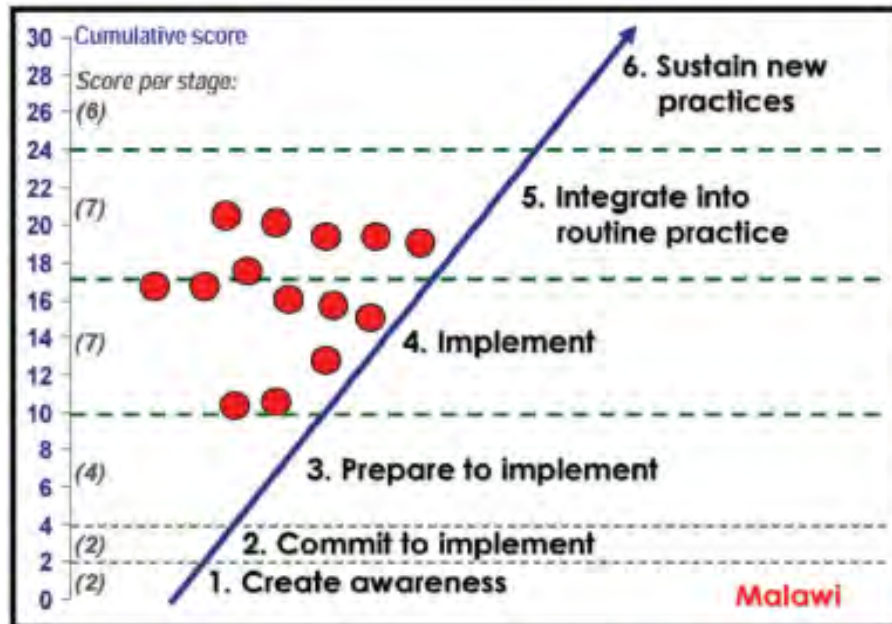
Newborn infections: what's currently collected (2)

Country	What is recorded	What is reported by facilities	What is in MOH bulletins/reports	Comments
Nepal	<u>CB-IMCI OPD register (< 2 months) captures:</u> <ul style="list-style-type: none"> • Circle Signs and symptoms (or observations) for each of following: <ul style="list-style-type: none"> - PSBI/LBI - Diarrhea - Low wt/Feeding problem - Assess breastfeeding • Classification(open-ended) • Treatment <ul style="list-style-type: none"> - Medicine (open-ended) - Counsel the mother - Referred to • Follow-up <ul style="list-style-type: none"> - Date - Result 	<i>In Nepali</i>	<ul style="list-style-type: none"> • # cases <2mos • # cases of: <ul style="list-style-type: none"> - PSBI - LBI - jaundice - hypothermia - low weight or feeding problem • # cases treated with: <ul style="list-style-type: none"> - cotrim - gentamycin • # cases referred • # of dead cases 	Note: Treatment by FCHVs/CHWs for 10 districts (CB-NCP) reported separately
Bangladesh	<i>In Bangla</i>	# cases very severe disease (0-28 days) Note: in IMCI reporting form, not in integrated monthly reporting form	# cases very severe disease (0-28 days)	•Unclear what is included in very severe disease •Treatment not reported

Routine PNC: What's collected through PNC registers

Country	What is recorded	What is reported by facilities	What is in MOH bulletins/reports	Comments
Uganda	<ul style="list-style-type: none"> • Status of baby (alive/dead) • Age (in weeks) • Weight (in kg) • Diagnosis (open -ended) • Infant feeding (1=exclusive, 2=replacement, 3=mixed) • Immunization (Y/N) • Infant HIV status • Septrin given (for HIV+) • Other treatment (open-ended) • Referral status (1=young child clinic, 2=HIV chronic, 3=other) 	# PNC attendances	# PNC visits (unclear if for mother, baby, or both)	<ul style="list-style-type: none"> • Timing not reported • PNC visits reported under 'antenatal section' • Reporting focused on mother (4 addt'l elements included in reports) • Open-ended questions
Nepal	<ul style="list-style-type: none"> • Timing of visit (within/after 48 hours) • Complication (open-ended) • Treatment (open-ended) • Referred from 	?	None	<ul style="list-style-type: none"> • PNC for baby captured but not reported (note: PNC for mother is reported) • Open-ended questions

What is operational?



HBB Indicators:

Implementation guide recommendations

Helping Babies Breathe Monitoring & Evaluation framework

Program implementation	Inputs	Process	Outputs	Outcomes	Impacts
	Financial and human resources Indicator: 1. Funds mobilized for HBB implementation	Integration of HBB in national plan for essential newborn care and emergency/obstetric and newborn care Indicator: 2. HBB included in national newborn plan	Improved access, equity, and quality of newborn resuscitation Indicators: 3. Number and percent of trainers trained by type of cadre and district 4. Number and percent of birth attendants trained by type of cadre and by district 5. Number & percent of health facilities equipped with resuscitation devices by district	Improved health outcomes and behaviors: Indicator: 6. Number and percent of babies not breathing at birth who were resuscitated successfully 7. Number & percent resuscitated successfully by key HBB action step • Crying (stimulation) • Clearing the airway/stimulation • Ventilation with bag and mask	Improved health status: Indicator: 8. Early neonatal mortality rate (7 days) Optional indicators: 9. Early NMR(7 day) 10. Neonatal mortality rate (28 days) 11. Stillbirth rate

Program Reports

Facility assessments (HMIS, SPA, QA/QI)
Quality, infrastructure, utilization, service, readiness

Vital registration
Routine vital values

Population-based survey & surveillance
(DHS/MICS, special surveys, sentinel surveillance)* Service coverage, equity, mortality

* HMIS: Health Management Information Systems; SPA: Service Provision Assessment; QA/QI: Quality Assurance/Quality Improvement; DHS: Demographic Health Surveys; MICS: Multiple Indicator Cluster Surveys.