Measurement improvement roadmap
# Overview of panel

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td><strong>Moderator</strong></td>
<td><strong>Joy Lawn</strong></td>
<td>15 min</td>
</tr>
<tr>
<td><strong>Count every newborn: a 5-year measurement improvement roadmap</strong></td>
<td><strong>Peter Waiswa</strong></td>
<td>15 min</td>
</tr>
<tr>
<td><strong>IMPACT</strong></td>
<td><strong>Agbessi Amouzou</strong></td>
<td>12 mins</td>
</tr>
<tr>
<td><strong>Care for all mothers and newborns: Measuring coverage and content of care</strong></td>
<td><strong>Sarah Moxon</strong></td>
<td>12 mins</td>
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<tr>
<td><strong>Care for newborns with complications: Measuring coverage and content of care</strong></td>
<td><strong>Kate Kerber</strong></td>
<td>10 mins</td>
</tr>
<tr>
<td><strong>Counting every stillbirth and neonatal death: Perinatal audit tools and implementation for improving quality of care linked to maternal death surveillance and response</strong></td>
<td><strong>Georgina Msemo and Shams El Arifeen</strong></td>
<td>3 mins each</td>
</tr>
<tr>
<td><strong>DISCUSSION PANEL</strong></td>
<td><strong>Matthews Mathai</strong></td>
<td>10 mins</td>
</tr>
<tr>
<td><strong>Tanzania and improving and using the data, links to scorecards</strong></td>
<td><strong>Discussion from the floor</strong></td>
<td>5 mins</td>
</tr>
<tr>
<td><strong>Bangladesh and improving and using the data</strong></td>
<td><strong>Close</strong></td>
<td>5 mins</td>
</tr>
<tr>
<td><strong>WHO’s role in co-ordinating maternal and newborn metrics</strong></td>
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Where to get more information

Lancet *Every Newborn* series: [http://www.thelancet.com/series/everynewborn](http://www.thelancet.com/series/everynewborn)


BMC Pregnancy and Childbirth series: [http://www.biomedcentral.com/bmcpregnancychildbirth/supplements/15/s2](http://www.biomedcentral.com/bmcpregnancychildbirth/supplements/15/s2)


MARCH MOOC: [http://www.lshtm.ac.uk/study/freeonlinecourses/women-children-health/index.html](http://www.lshtm.ac.uk/study/freeonlinecourses/women-children-health/index.html)

UNICEF: [www.childmortality.org](http://www.childmortality.org)

Healthy Newborn Network: [http://www.healthynewbornnetwork.org/page/newborn-numbers](http://www.healthynewbornnetwork.org/page/newborn-numbers)

Care for all mothers and newborns: Measuring coverage and content of care

Dr Agbessi Amouzou
## Indicators to track progress of Every Newborn Action Plan

<table>
<thead>
<tr>
<th>Current Status</th>
<th>Core ENAP Indicators</th>
<th>Additional indicators</th>
</tr>
</thead>
</table>
| Definitions clear but quantity and consistency of data lacking | 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** |

### Impact

1. Skilled attendant at birth  
2. Early postnatal care for mothers and babies  
3. Essential newborn care (tracer is early breastfeeding)  
4. Antenatal corticosteroid use  
5. Neonatal resuscitation  
6. Kangaroo mother care  
7. Treatment of serious neonatal infections

### Coverage: Care for All Mothers and Newborns

- **Coverage:** Care for All Mothers and Newborns
- **Coverage:** Complications and extra care
- **Input:** Service Delivery Packages for Quality of Care
- **Input:** Counting

#### 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)

#### Coverage: Complications and extra care

- 7. Antenatal corticosteroid use  
- 8. Neonatal resuscitation  
- 9. Kangaroo mother care  
- 10. Treatment of serious neonatal infections

#### 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

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*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  
Outline

- What is the status for these coverage indicators?
  - Skilled attendance
  - Postnatal care
- What are data gaps?
- What to do to improve the data?
Skilled attendance coverage data

- Data for coverage has increased substantially since 2000

- Coverage levels have also improved across countries
  - In Countdown countries, median coverage increased from 55% to 65% from 2000-08 to 2009-14

Skilled attendance coverage data

Women from the richest households are almost three times more likely to deliver with skilled health personnel as those from poorest.

Percentage of birth attended by skilled health personnel, by region and household wealth quintiles, around 2000 and around 2014.

Note: *Excluding China.

Skilled attendance coverage data

Higher % of birth attended by skilled personnel is associated with lower neonatal mortality rate but there is a great deal of variability, especially at NMR>20

Skilled birth attendance: measurement challenges

- WHO definition is clear, but application in national policy is variable between countries and over time as cadres change.

- Specific challenges in household surveys:
  - Validity of respondent’s response on birth attendant is questionable.
  - Response categories in survey questionnaires are not consistent over time.
  - Preliminary work in Kenya and Mexico suggests women tend to overestimate qualification of provider (Blanc et al, 2015).
  - Respondents are more likely to report accurately providers that are most common in the setting.

While the coverage indicator and especially trends have challenges, the biggest measurement challenges are regarding CONTENT or QUALITY.
Survey data on Postnatal health checks has become increasingly available in LMIC

Number of countries with data on PNC for mother and newborn from DHS and MICS in LMIC over time

Source: UNICEF’s global databases, 2015
Postnatal health check coverage data

Percentage of mothers and newborns with a postnatal health check within two days of delivery, 2010-2015

Postnatal care: measurement challenges

- Postnatal care indicator is complex
  - Need to distinguish place of birth, birth attendant, and postnatal visit

- Survey questions have changed over time and are not consistent across survey programs
  - New modules in MICS and DHS aim at similar indicators but are structured differently

- Validity of survey responses is yet to be ascertained
  - Wording of health check questions now incorporates explanation of what is meant by health check to improve accuracy of responses

- MICS data on PNC are becoming available and will allow further quality assessment and analysis
Quality and Data gaps

Quality gap (and data gaps)
Coverage along the continuum of care in 75 Countdown countries

Source: Dickson et al, 2015
Quality gap: Linking Content to Contact – Subnational Analysis

<table>
<thead>
<tr>
<th>Location</th>
<th>ANC Coverage</th>
<th>ANC High quality</th>
<th>SAB Coverage</th>
<th>SAB High quality</th>
<th>Postpartum check</th>
<th>Postnatal check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gombe (Nigeria)</td>
<td>61</td>
<td>11</td>
<td>22</td>
<td>8</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>56</td>
<td>4</td>
<td>15</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Uttar Pradesh (India)</td>
<td>74</td>
<td>6</td>
<td>76</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
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Marchant et al, 2015
QUALITY gap for facility births

Could save 2 million lives a year by closing this quality gap for births already in facilities

Critical need for data to inform and track action

Source: Lancet Every Newborn series, paper 3 and 4
Improving data for coverage and content of care

- Need more systematic research on measurement of content and quality of care linked to coverage
  - Validation of content of intrapartum and postnatal care questions from surveys (ICM)
  - Linking household surveys to health facilities may provide promising avenue
    - Improving Coverage Measurement group’s work
    - IDEAS’ work coverage-quality gap
  - Promising avenues with GIS mapping with linkages between facility surveys and DHS/MICS
  - Some INDEPTH now have individually data linked for household and facility based services and these very rich data sources could be invaluable

- ENAP metrics doing validation/testing of facility based indicators
- MICS planning further field testing of essential newborn care and postnatal content care questions
- UNICEF and WHO are currently collaboration to harmonize maternal health indicators databases with specific focus on definition
- More collaboration and common protocols would help make faster progress together