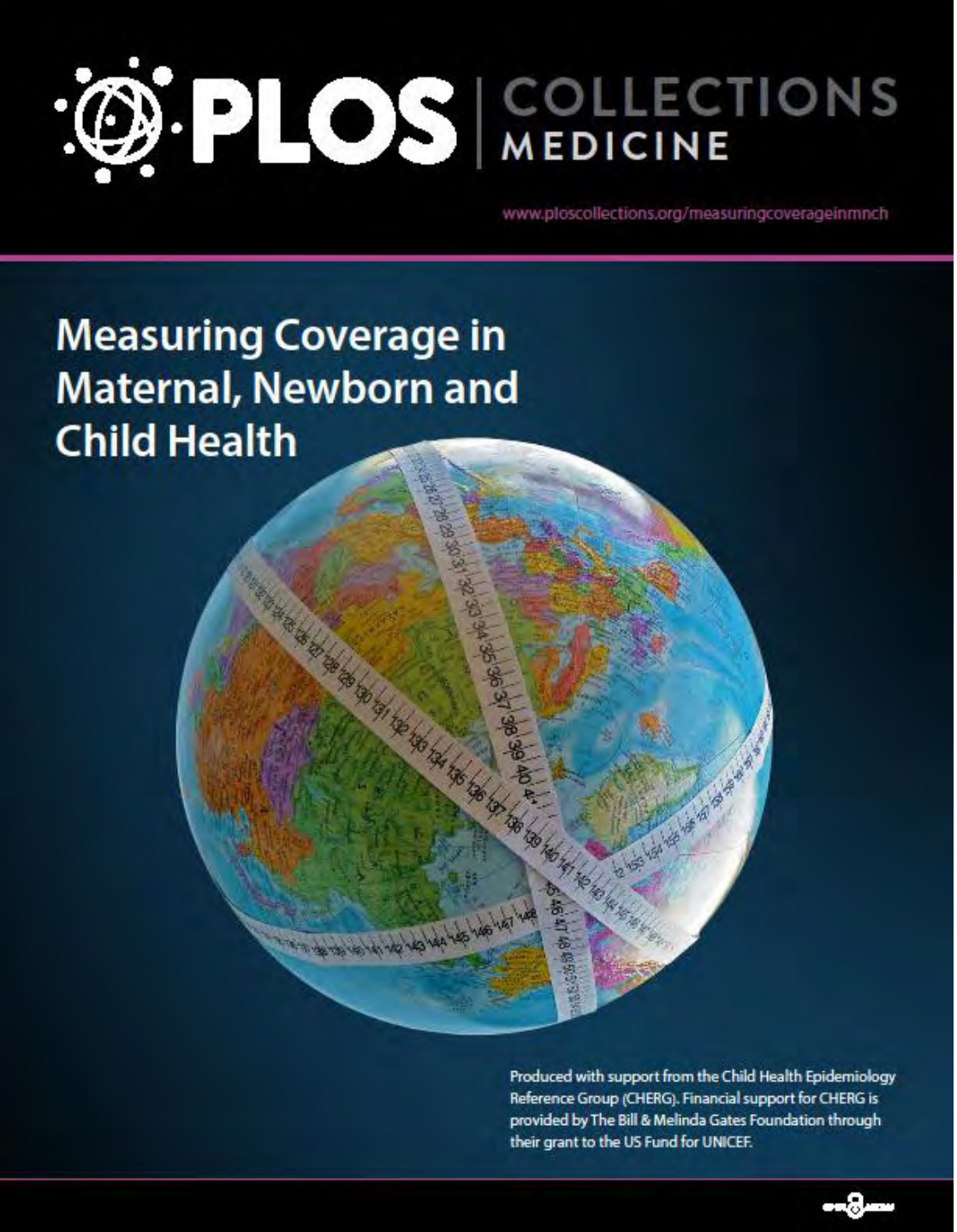

Introduction and Overview

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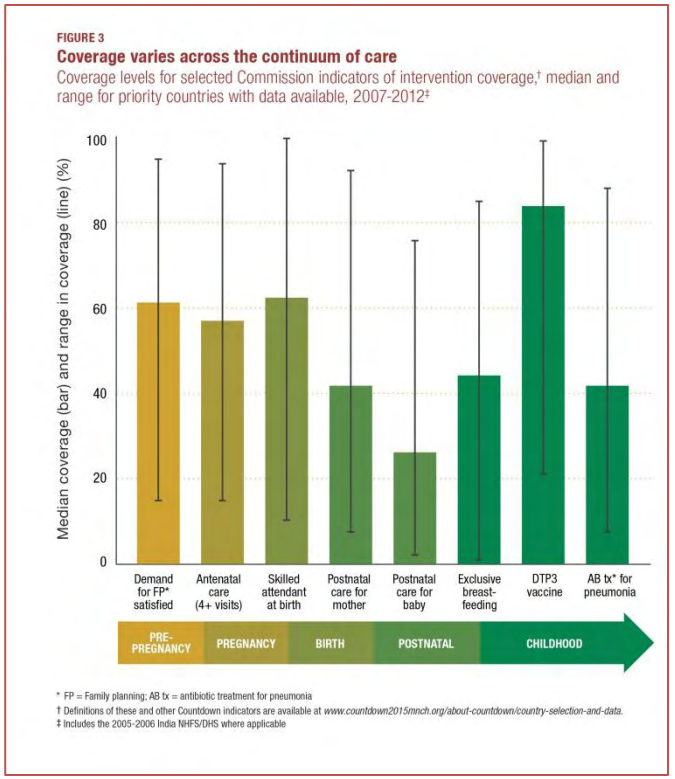
#CoverMNCH

Countdown to 2015
Maternal, Newborn & Child Survival

WHY COVERAGE?

- We have life-saving interventions
- But they are reaching too few women and children
- Who are the unreached? Where are they?



Source: Countdown Report 2013.

Accurate measurement of intervention coverage is the basis for effective programs that save lives.

Measuring Coverage

- Most high-burden countries rely on two international survey programs
  - Demographic and Health Surveys (USAID)
  - Multiple Indicator Cluster Surveys (UNICEF)
- The science of coverage measurement continues to evolve – it is not easy!

Child Health Epidemiology Reference Group

- Established in 2001 to advise WHO and UNICEF on issues related to evidence in MNCH epidemiology
- Working Group on Improving Coverage Measurement established in 2009; technical experts including DHS and MICS

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Linked to Countdown Coverage Technical Working Group.

- The *Collection* presents the results of this work, and related work by others

METHODS

- Scope: Measurement of coverage through household surveys for proven MNCH interventions
- Activities:
  - Validation studies
  - Measurement reviews
  - Commissioned papers on methodological issues
- Quality control: Internal and external peer review

Key Findings in Three Areas

1) Validity of coverage estimates based on respondents' reports
2) Potential strategies for improving coverage measurement
3) Cross-cutting methodological issues

THE VALIDITY OF RESPONDENTS' REPORTS

- Basic design

***Step 1*: Observe intervention delivery**
(and/or review of records, where adequate)

***Step 2*: Wait**,
based on recall period
in DHS/MICS.

***Step 3*: Conduct household interviews**

1) Standard DHS/MICS questions
2) Additional or modified questions
3) Inclusion of strategies to aid recall

***Step 4*: Compare,**
determining validity of
respondents' reports

TERMINOLOGY

- **Sensitivity of recall**: *proportion of mothers who correctly said the intervention was received*
- **Specificity of recall** : *proportion of mothers who correctly said the intervention was not received*
- **Accuracy of recall**: *proportion of mothers who got it right*

RESEARCH STUDIES

- Emergency C-Sections*
  Ghana, Dominican Republic
- Interventions delivered around the time of birth*
  Mozambique
- Pneumonia diagnosis and treatment
  Pakistan, Bangladesh
- Malaria diagnosis and treatment
  Zambia
- Interventions across the MNCH continuum of care
  China

*Results to be presented later in the program.

Selected Results: Accuracy of measurement

Mothers' recall of interventions varied:

- By intervention
- By setting

We are measuring coverage for some interventions very well!

Sensitivity & specificity of coverage indicators for selected interventions and settings

Intervention	Sensitivity (%)	Specificity (%)	Accuracy (%)
Antenatal care -1 visit (China)	90	22	56
Location of birth in hospital vs health center (Mozambique)	81	94	88
Emergency C-section			
Ghana	79	82	80
Dominican Republic	50	80	65
Any C-section (China)	96	83	90
DPT3 vaccine (China)	89	70	80

Selected Results: Structural challenges

- **Obtaining adequate denominators**
  - For rare events
  - To support analyses for age, sex or equity subgroups
- **Relying on health facility records**
  - Overestimates true coverage
  - Excludes those not in contact with health services
- **Contextual challenges to respondent recall**
  - Information offered by provider
  - Interviewer behavior
  - Recall periods
  - Length of the interview

Selected Results: Strategies for Improvement

- Using memory aides to improve accuracy
- Refining survey questionnaires and procedures
- Linking household surveys to other data sources
- Incorporating information technology
- Increasing the salience of intervention delivery
- Using measures that do not rely on respondents' reports

We can do better – and we will!

CROSS-CUTTING METHODOLOGICAL ISSUES

- Survey quality matters!
- Both sampling and non-sampling error must be taken into account
- Reporting for specific subpopulations makes coverage data more useful to policy and program decision makers

SOME RESULTS HAVE ALREADY BEEN TAKEN UP

- Change in question on Cesarean section
- Addition of 1 question to distinguish emergency from non-emergency Cesarean sections
- Addition of careseeking for pneumonia to global monitoring “short list” to aid in interpretation of progress in treatment

We hope this is just a start

THE BOTTOM LINE

- High-quality household survey programs are a global public good, and must be continued
- There is an urgent learning agenda in coverage measurement
  - Ongoing improvement
  - Potential for shorter, lighter surveys
  - Links between surveys and comparable assessments in service delivery settings

We can do better – and we will!

CONTRIBUTORS

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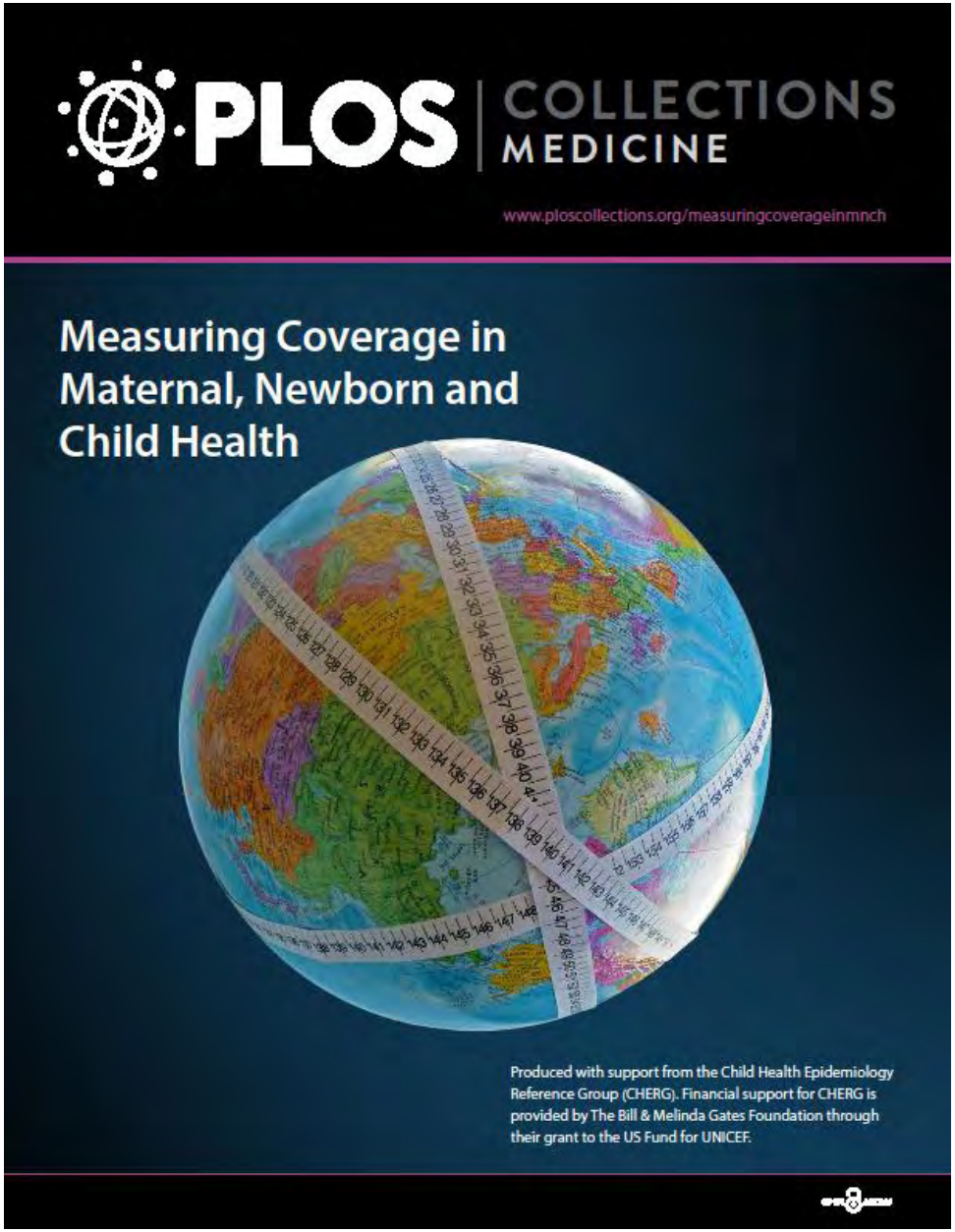

http://www.ploscollections.org/measuringcoverageinmnch