

# Monitoring of Child Health Services

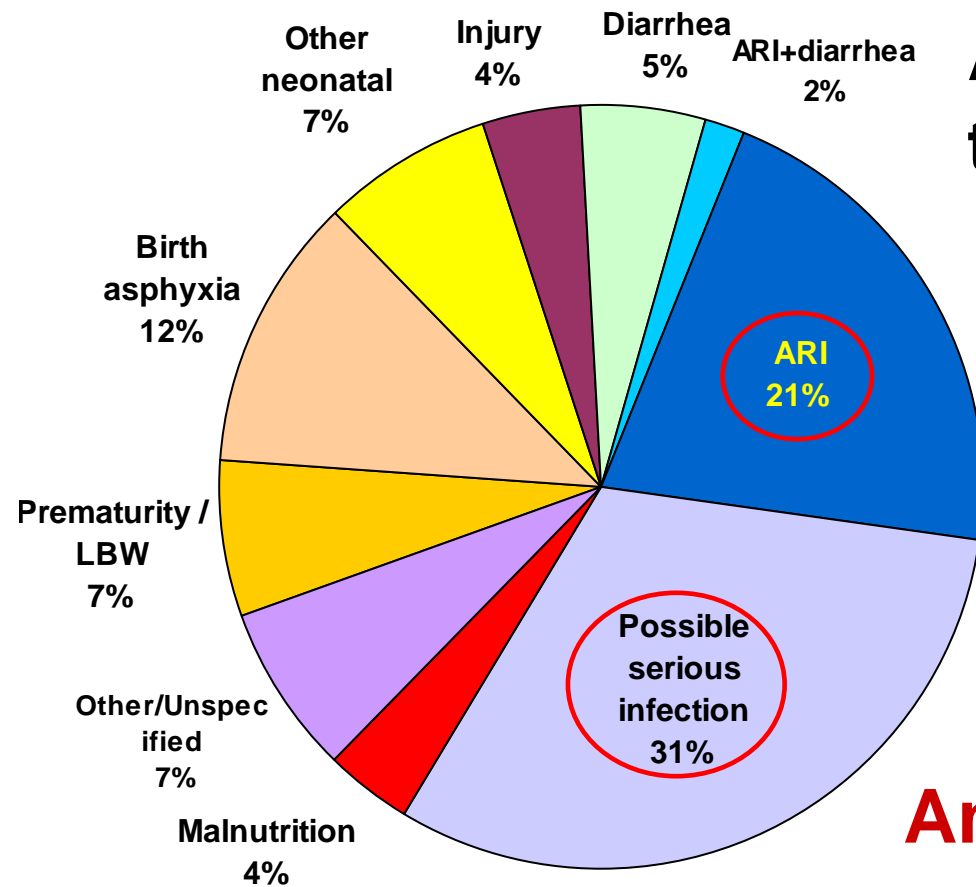


Bangladesh

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# Cause of Death Distribution of Under-5 Deaths in Bangladesh: 1994-2003



**ARI and infections are the biggest killers**

**Antibiotics for pneumonia and sepsis are critical interventions**

Source: Bangladesh Demographic and Health Survey, 2004

## Child survival II

### How many child deaths can we prevent this year?

Gareth Jones, Richard W Steketee, Robert E Black, Zulfiqar A Bhutta, Saul S Morris, and the Bellagio Child Survival Study Group\*

This is the second of five papers in the child survival series. The first focused on continuing high rates of child mortality (over 10 million each year) from preventable causes: diarrhoea, pneumonia, measles, malaria, HIV/AIDS, the underlying cause of undernutrition, and a small group of causes leading to neonatal deaths. We review child survival interventions feasible for delivery at high coverage in low-income settings, and classify these as level 1 (sufficient evidence of effect), level 2 (limited evidence), or level 3 (inadequate evidence). Our results show that at least one level-1 intervention is available for preventing or treating each main cause of death among children younger than 5 years, apart from birth asphyxia, for which a level-2 intervention is available. There is also limited evidence for several other interventions. However, global coverage for most interventions is below 50%. If level 1 or 2 interventions were universally available, 63% of child deaths could be prevented. These findings show that the interventions needed to achieve the millennium development goal of reducing child mortality by two-thirds by 2015 are available, but <sup>11</sup> they are not being delivered to the mothers and children who need them.

The first paper in this series on child survival presented an unacceptable picture: more than 10 million children dying every year, almost all in low-income countries or poor

Our aim, the translation

... global coverage for most interventions is below 50%. If .... interventions were universally available, 63% of child deaths could be prevented.

## Neonatal Survival 2

### Evidence-based, cost-effective interventions: how many newborn babies can we save?

Gary L. Darmstadt, Zulfiqar A. Bhutta, Simon Cousens, Taghreed Adam, Neff Walker

In this second article of the neonatal survival series (the first article discussed the unacceptably high number of neonatal deaths that happen every year worldwide), we discuss evidence-based, cost-effective interventions that could avert an estimated 41–72% of neonatal deaths worldwide. We derive estimates of the number and number of neonatal deaths that could be averted with these interventions in 75 countries under ideal conditions) for neonatal survival according to three service packages of care: family-community care, facility-based clinical care, and universal facility-based clinical services, which make up 62% of the total cost. Each averting neonatal deaths is possible in settings with high mortality and weak health systems through family-community care, including health education to improve home-care practices, to create demand for and to improve care seeking. Simultaneous expansion of clinical care for babies and mothers is essential for the reduction in neonatal deaths needed to meet the Millennium Development Goal for child survival.

This report is the second in a series addressing neonatal survival.<sup>1</sup> The first article<sup>2</sup> discussed the unacceptably high number of neonatal deaths that happen every year worldwide. We derive estimates of the number and number of neonatal deaths that could be averted with these interventions in 75 countries under ideal conditions) for neonatal survival according to three service packages of care: family-community care, facility-based clinical care, and universal facility-based clinical services, which make up 62% of the total cost. Each averting neonatal deaths is possible in settings with high mortality and weak health systems through family-community care, including health education to improve home-care practices, to create demand for and to improve care seeking. Simultaneous expansion of clinical care for babies and mothers is essential for the reduction in neonatal deaths needed to meet the Millennium Development Goal for child survival.

... universal (99%) coverage of these interventions could avert an estimated 41–72% of neonatal deaths worldwide...

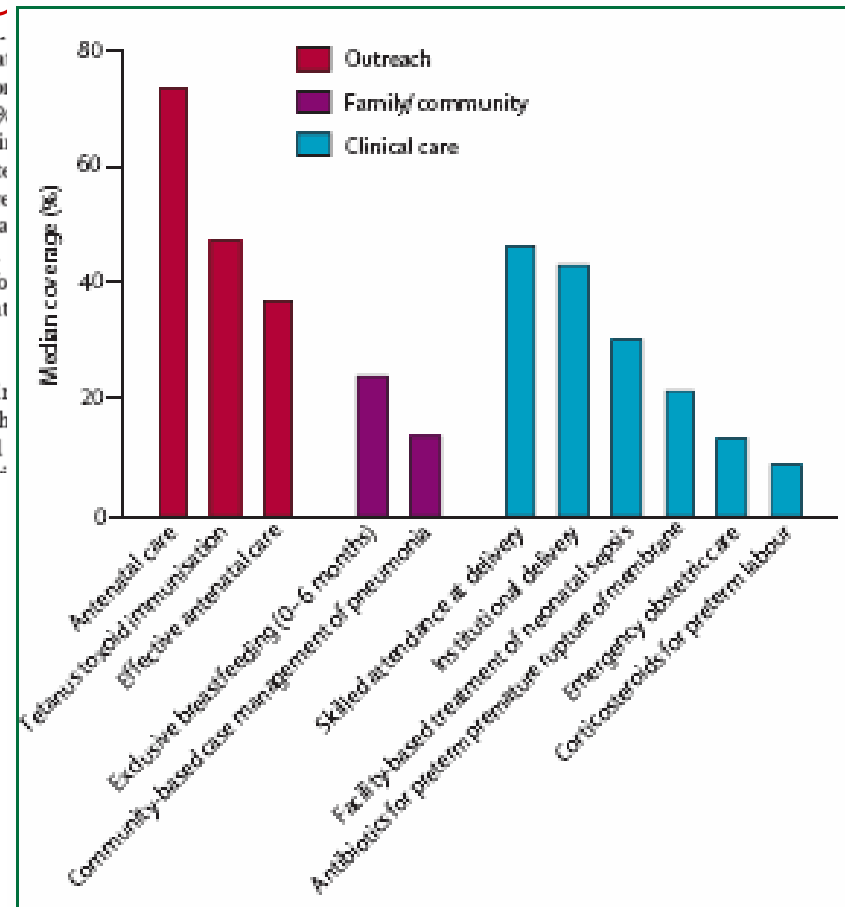


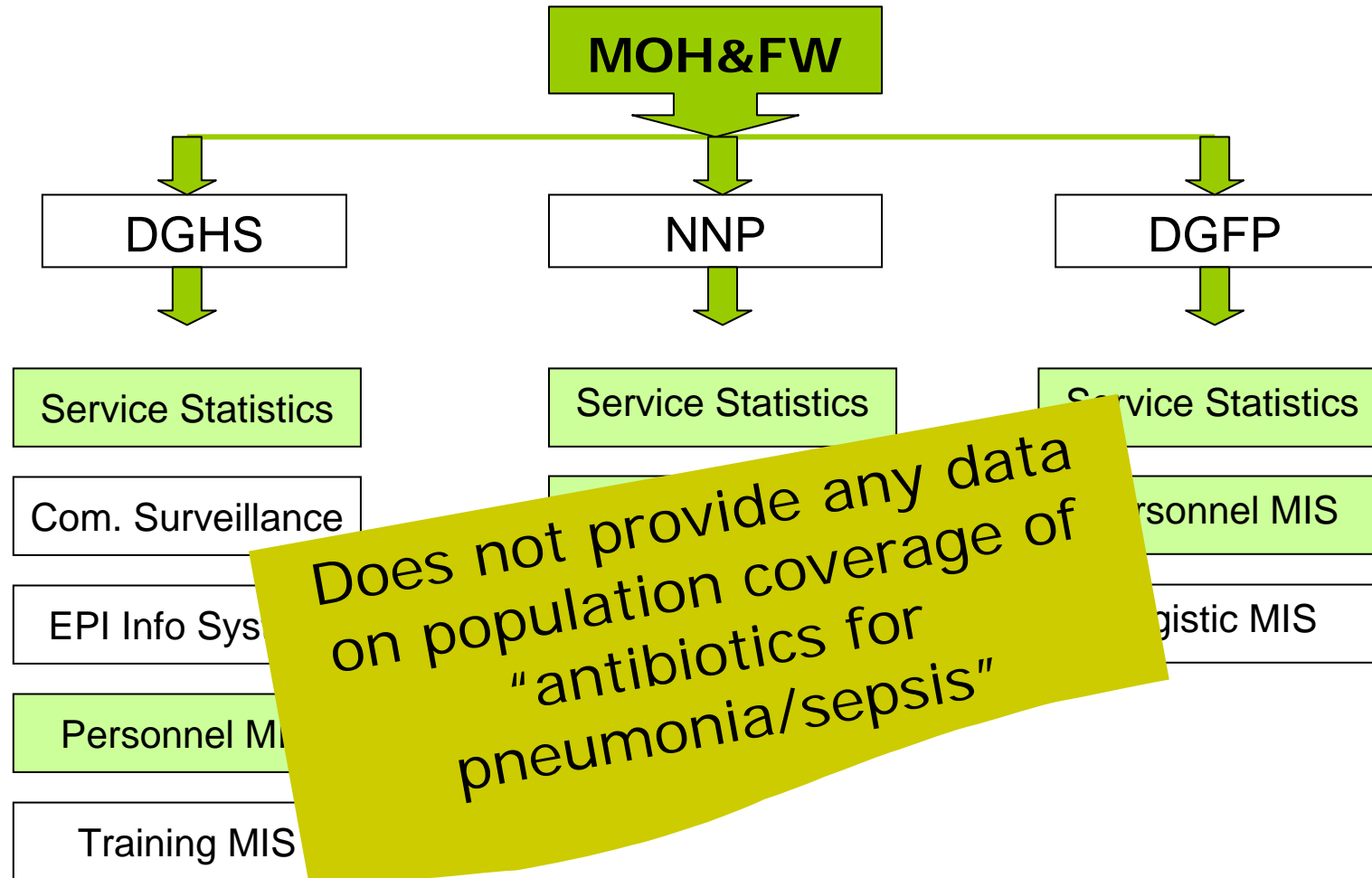
Figure 2: Reported and estimated degrees of current coverage of neonatal interventions in 75 countries, 2000<sup>18</sup>

# Measuring Coverage

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- How can we measure coverage of case management of pneumonia and sepsis in Bangladesh?

# Government Health MIS



Does not provide any data on population coverage of "antibiotics for pneumonia/sepsis"

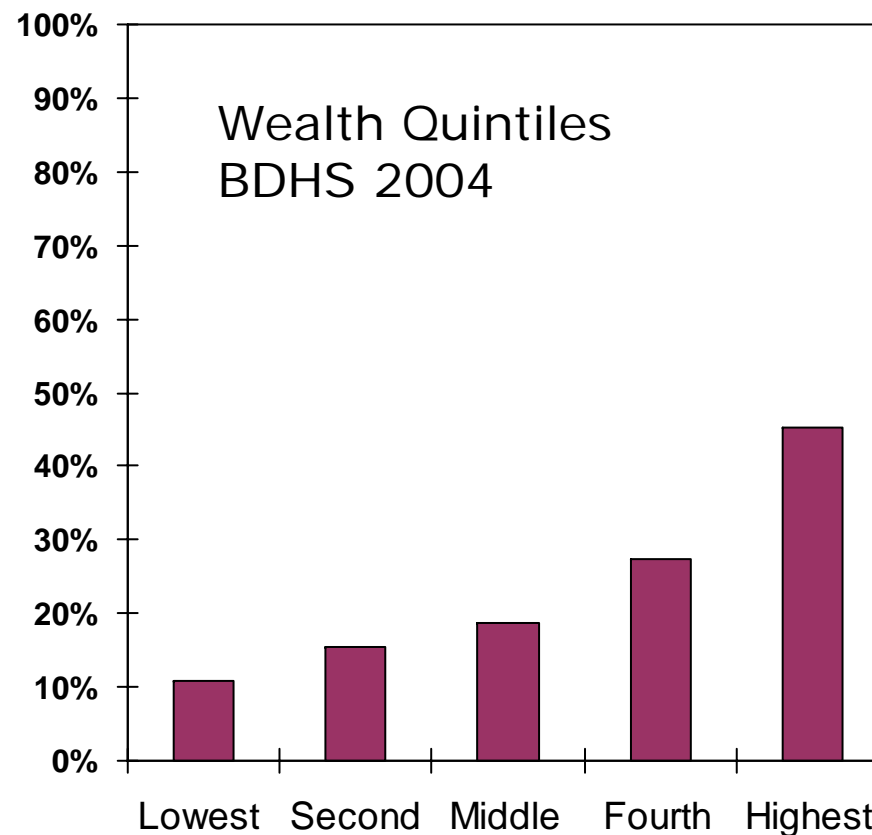
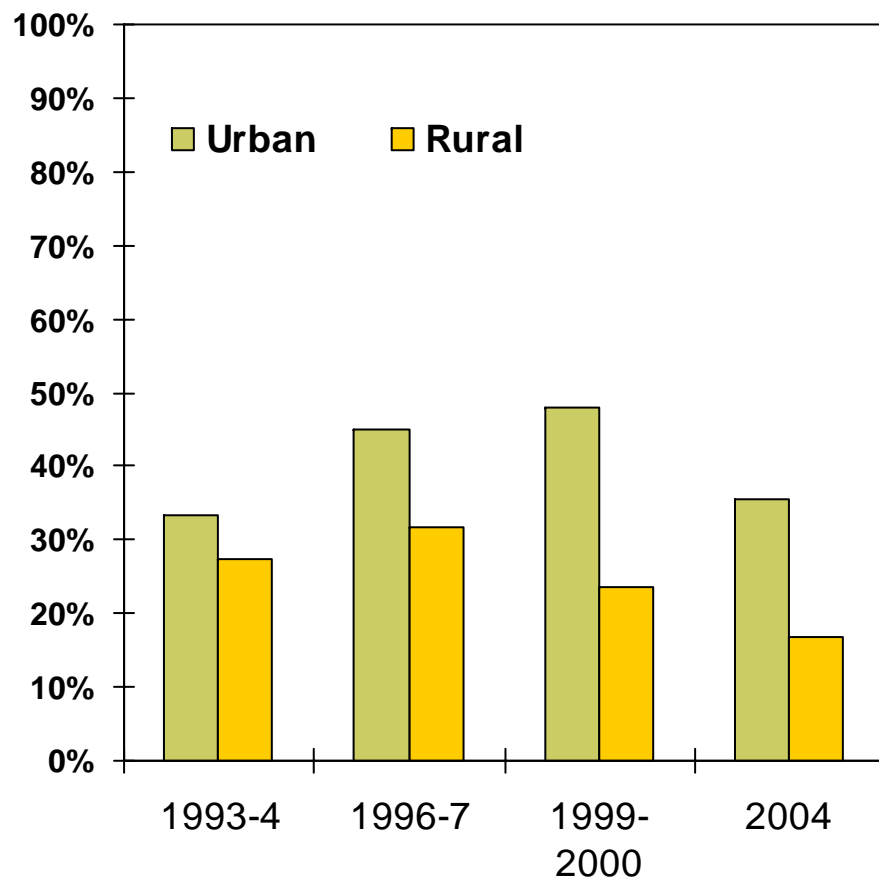
# Other Sources of Data

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- DHS – Every 3-4 years
  - authentic
  - commonly used for health sector planning
- MICS – Every 3-4 years
  - district coverage and utilisation data
- Child Nutrition Survey – Periodic

These surveys also do not directly provide population-based coverage of “antibiotic for pneumonia / sepsis”

# % Seeking Care from Health Facilities and Health Workers for ARI



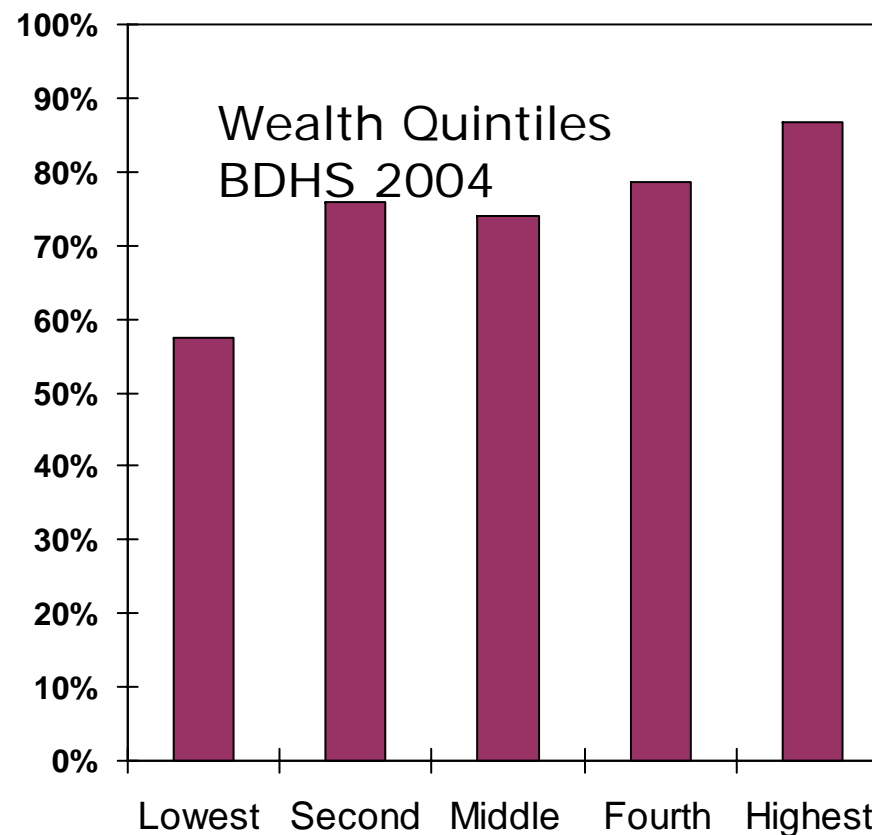
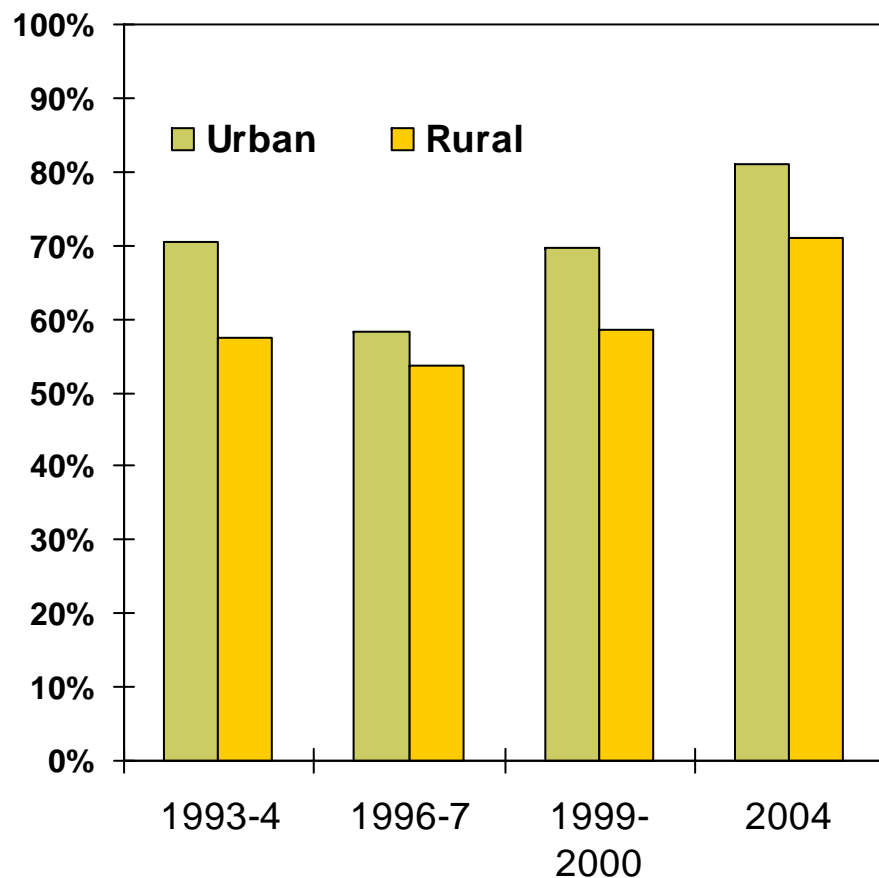
Source: Bangladesh Demographic and Health Surveys

# Case Study - EPI

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- EPI Management Information:
  - Routine EPI reports (for every administrative level)
  - Routine data quality auditing supported by GAVI – sample districts
  - Coverage evaluation surveys (also includes EPI+ indicators, e.g. Vit-A, deworming):
    - Routinely (annually) for 6 divisions, urban slums, Dhaka urban
    - All 64 districts in 2002, 2005, 2006

# Coverage of Full Immunization: 12-23 Month Old Children



Source: Bangladesh Demographic and Health Surveys

# Lessons from EPI

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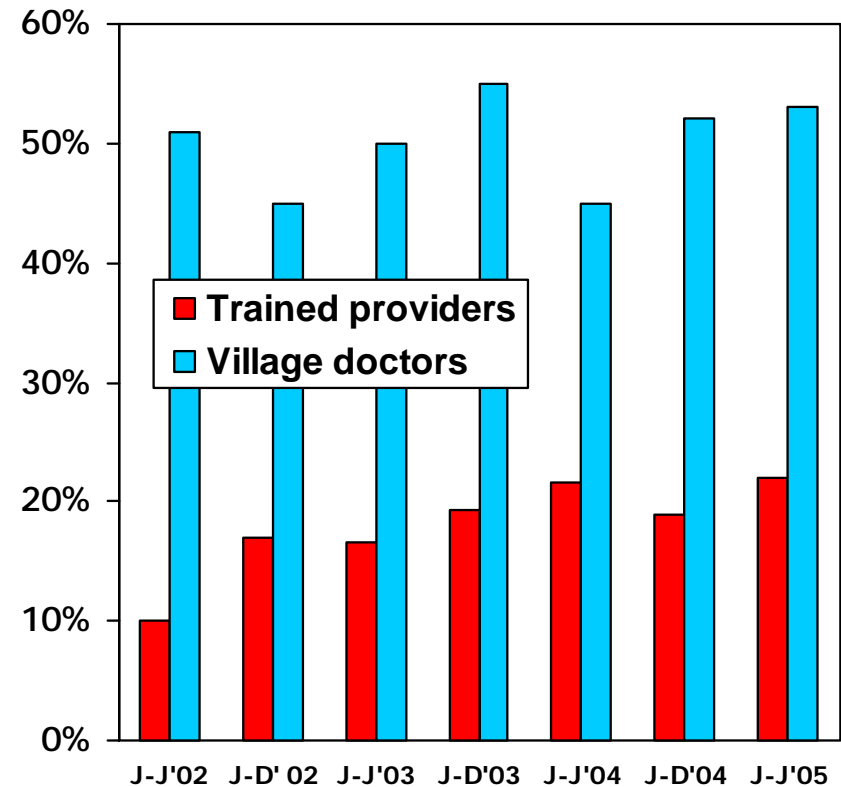
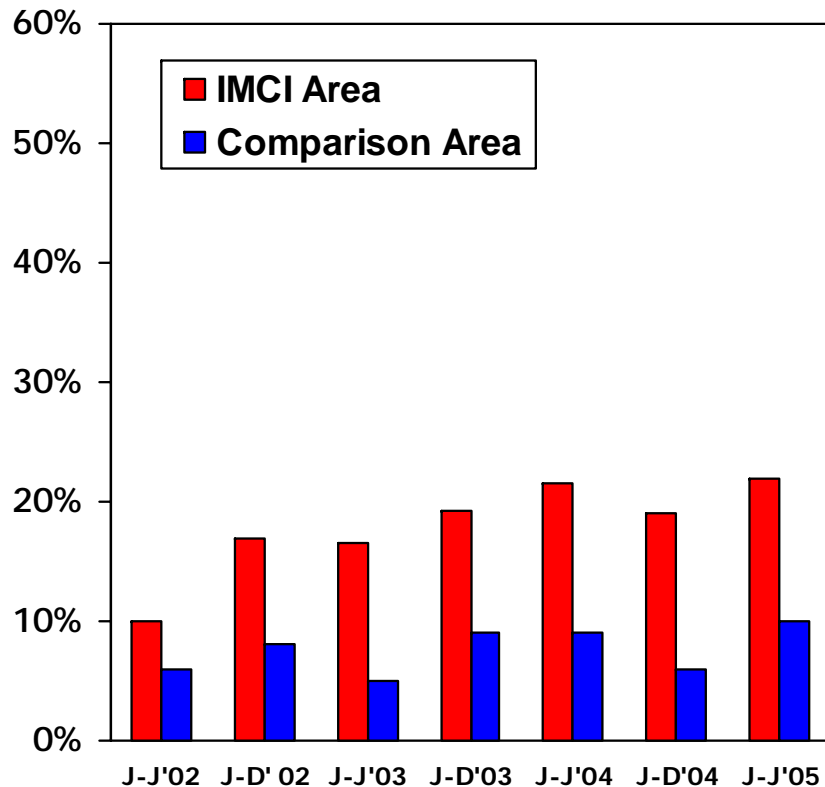
- Use of both routine reports and population surveys
- Estimates for district levels - can be linked to district management decisions
- Information is used for local level planning and management – Reach Every District (RED) approach
- GAVI/DQA improve data authenticity including data management for improving routine reporting systems
  
- Measuring coverage of essential interventions like “antibiotic use for pneumonia/sepsis” presents particular challenges
- However, we will need to invest in adequate monitoring systems, if we really mean to achieve “change”

# Monitoring Pneumonia/Sepsis Case Management

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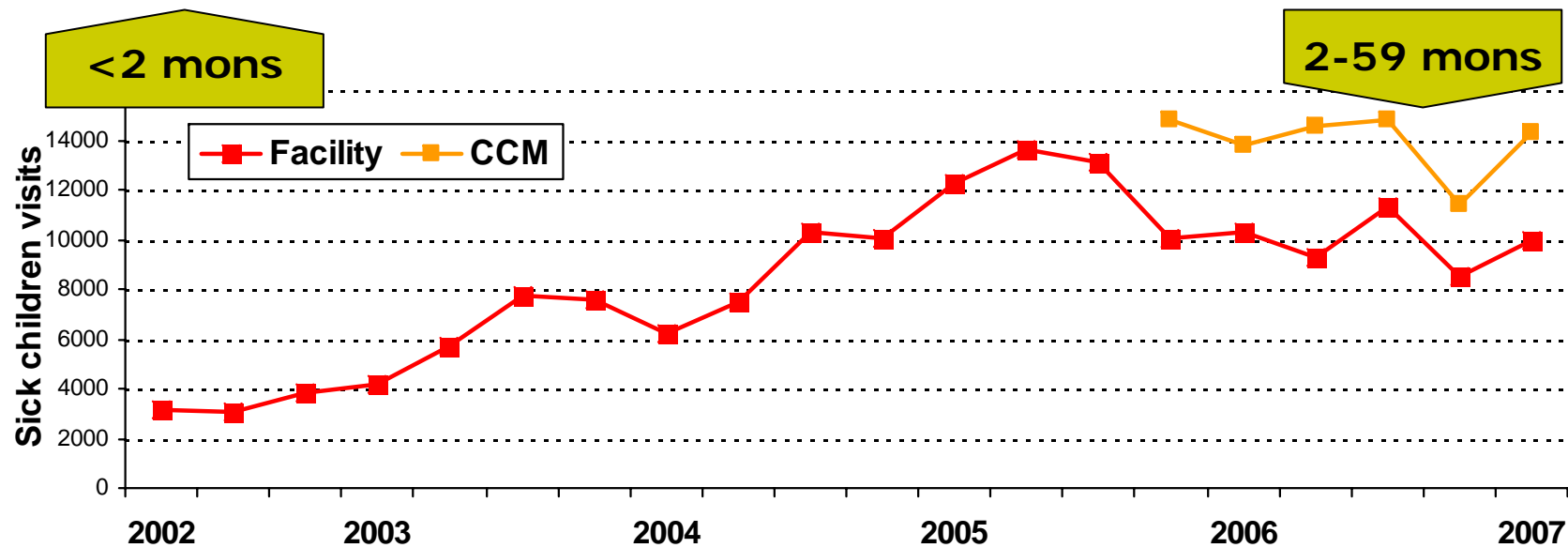
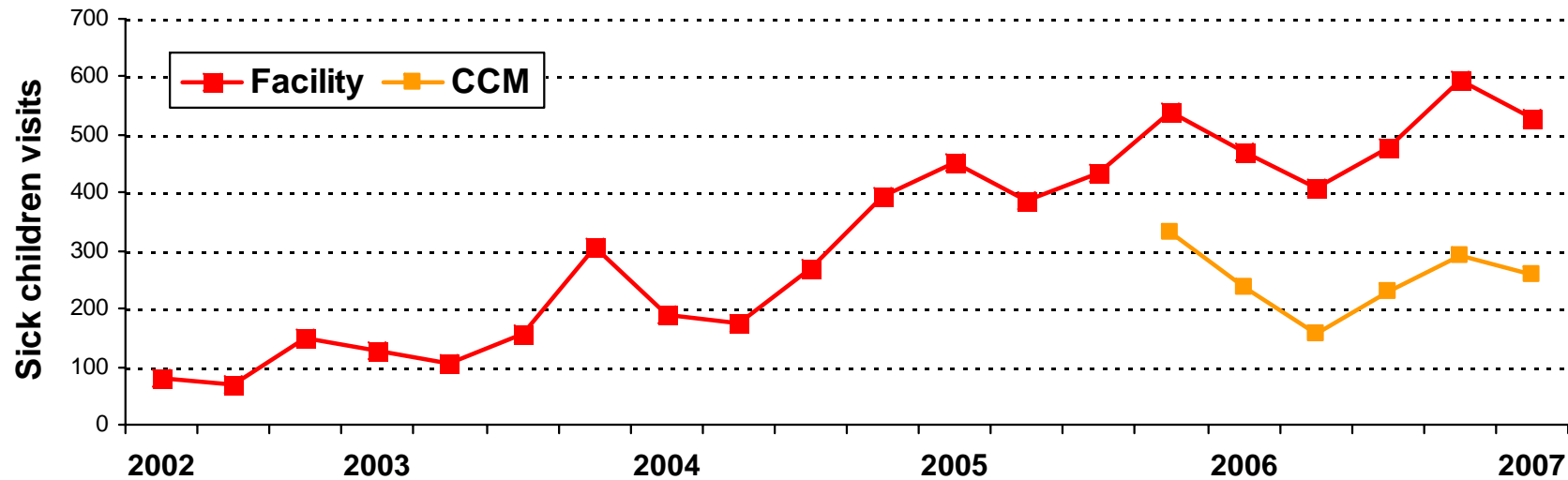
- Population coverage is absolutely critical
- What else we will need to monitor:
  - Availability of services
  - Quality of services
  - Utilization of services
- Appropriate & disaggregated information

# With IMCI, More Sick Children are Taken to Trained Providers for Care...But



Proportion of children ill in the last two weeks who were taken to trained (appropriate) health providers for care

# Utilization of Health Facilities and Community Case management is Age Dependant

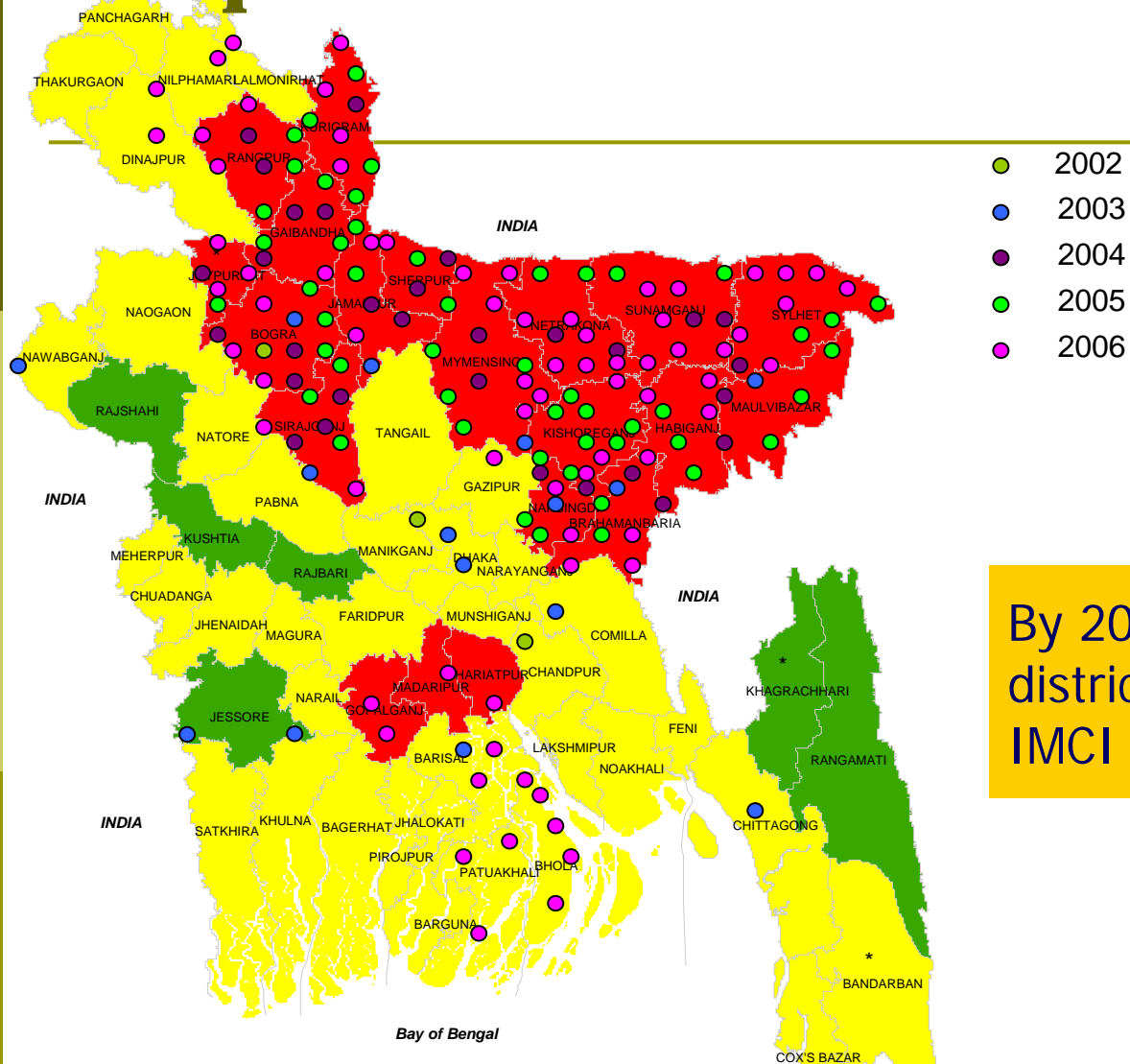


## Other Sources of Data – Special Surveys

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- Health and Injury Survey (ICMH/UNICEF 2005)
- Maternal health and mortality survey (NIPORT/USAID 2001)
- National anaemia survey (UNICEF/BBS 2003)
- National low birth weight survey (UNICEF/BBS, 2003-04)

# Expansion of IMCI Guided by Evidence of Need



By 2006, 148 of 159 sub-districts in the "red" areas with IMCI

Bangladesh Maternal Mortality Survey, 2001: Provided District Under-5 Mortality Estimates

# Improving MoH Monitoring Systems – Some Thoughts

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- A strong M&E unit within MoH
  - Coordinate
  - Use the data
  - Capacity development of programme/field managers
- Streamline existing surveys to track interventions essential for the MDGs
- Expand the lessons from EPI's DQA