

Knowledge to Action: IMCI and iCCM

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iCCM 2014

**Integrated Community Case Management (iCCM):
Evidence Review Symposium**
3-5 March 2014, Accra, Ghana

Outline

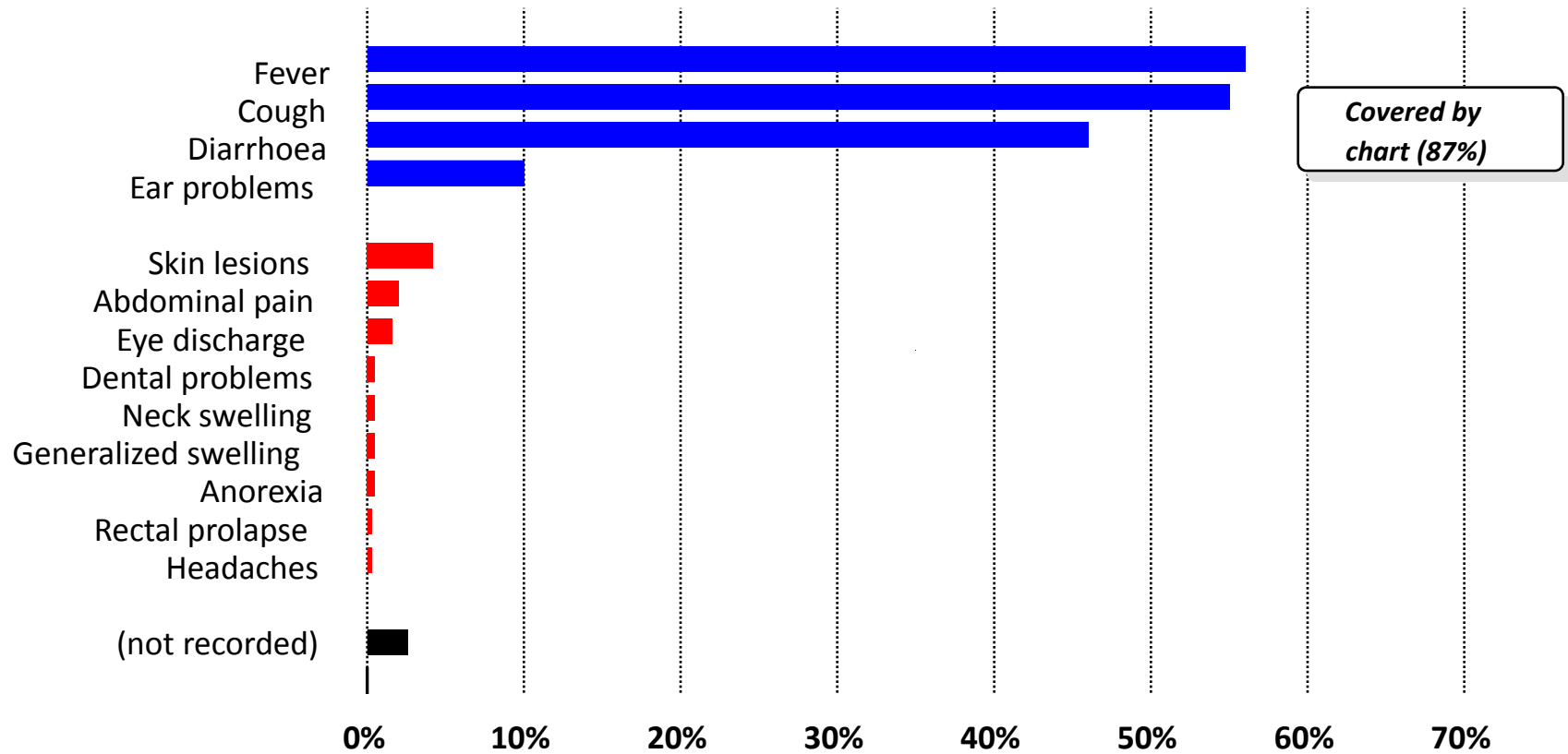
- **Rationale**
- Evidence
- From knowledge to action
- Way Forward



iCCM and IMCI

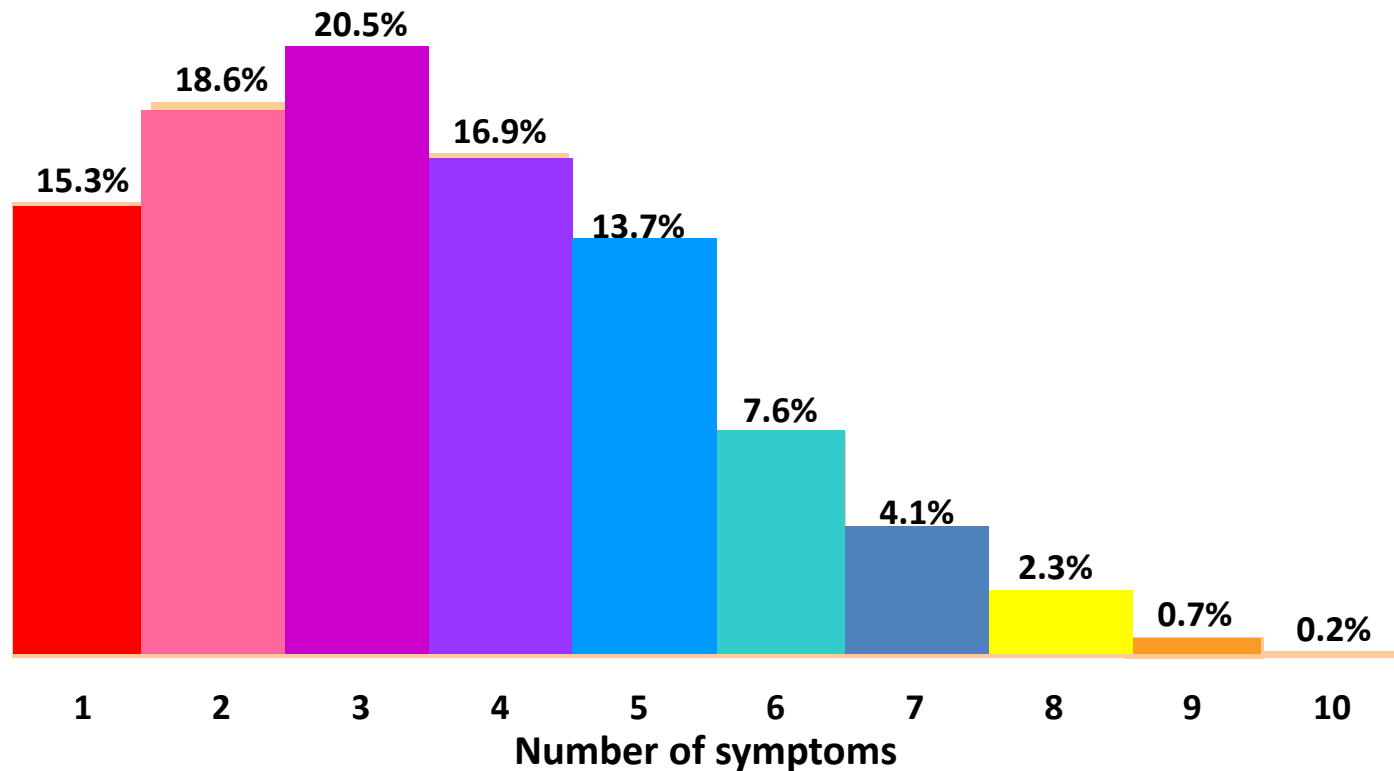
- IMCI and iCCM are complementary case management strategies with the same goal
 - No child needs to die of pneumonia, diarrhoea, malaria, malnutrition
 - Every child has access to quality care

Frequency of presenting complaints of 450 children (as volunteered by their mothers), Gondar, Ethiopia, 1994



Most children have more than one illness at a time

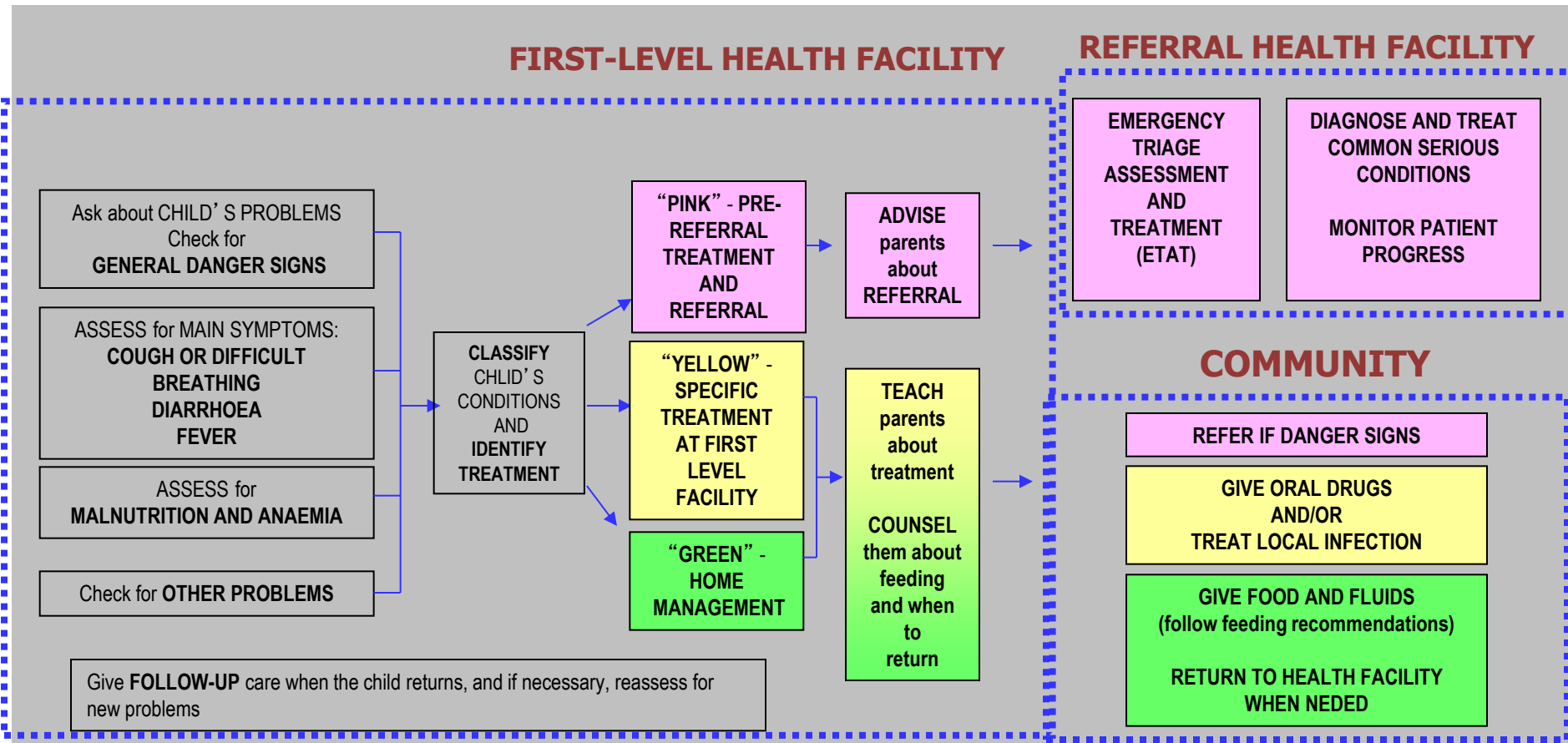
Number of symptoms in previous two weeks reported among sick children under five in Matlab Thana, Bangladesh, 2000 (n = 1302).



Breaking the myth

- Integrated case management
- Simplified, affordable and effective treatment delivered by most available health worker
- Empowered HW/CHWs/families to be able to take care of their health, that of their community and families

Case management at first level, referral level and in the community



Care seeking along the continuum of care

Interventions delivered at home, primary health facility and hospital

Home/Community



1st level facility



Hospital



Number of children seen

Specialised care

Equipment, supplies, case management skills

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Community case management (CCM) - Pneumonia

Components of CCM

- Based on simple signs - fast breathing and chest indrawing
- Oral antibiotic
- Parents empowered to recognize symptoms of pneumonia and danger signs
- CHWs empowered to assess, diagnose and treat

Simplified treatment,
Empowered HW, families

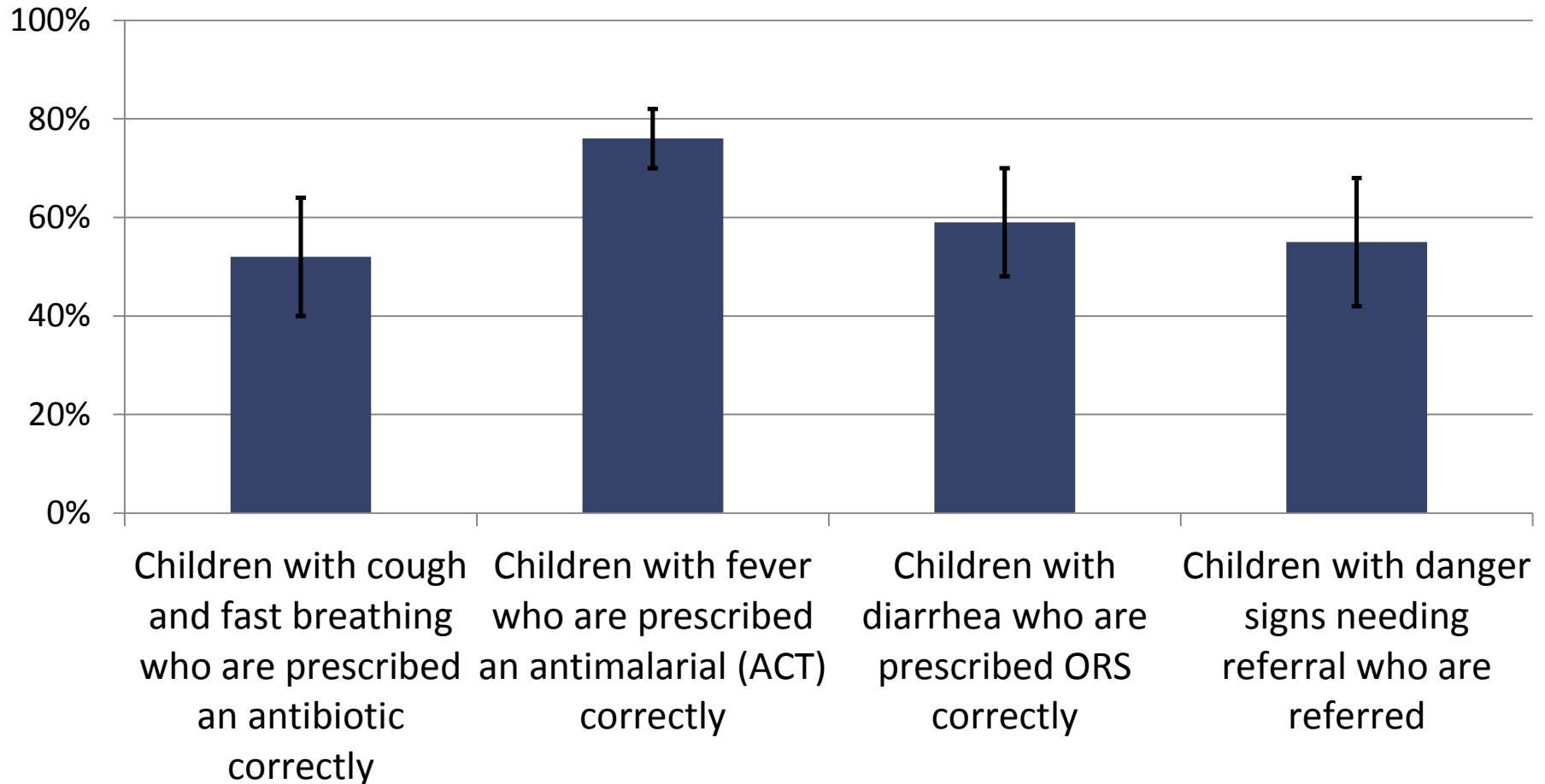
Mortality impact of CCM

(Sazawal & Black 2003 & Theodoratou E et al 2010)

	% Mortality Reduction	
	Pneumonia Mortality	Total Mortality
Neonates	42% (22-57)	27% (18-35)
Infants	36% (20-48)	20% (11-28)
Children 0-4 yr.	36% (20-49) 35%	24% (14-33) 21%

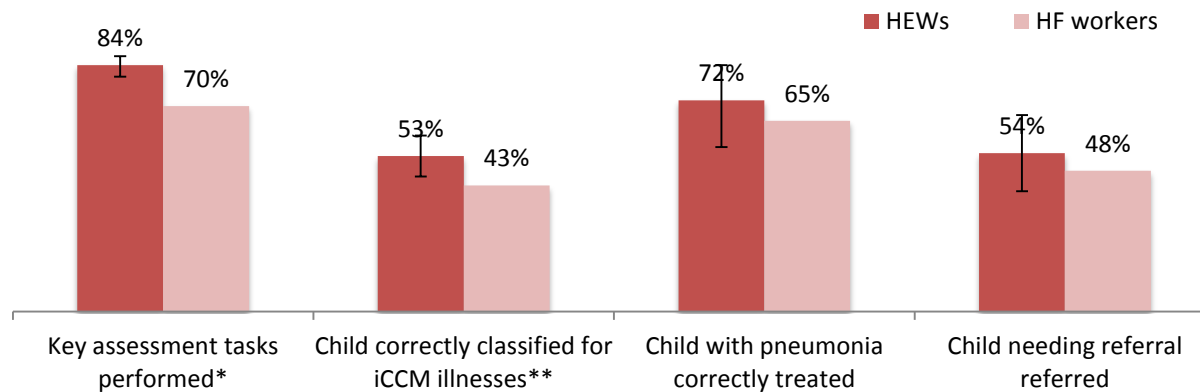
Quality of case management- iCCM

Treatment provided by trained HSAs in 6 districts in Malawi, 2009



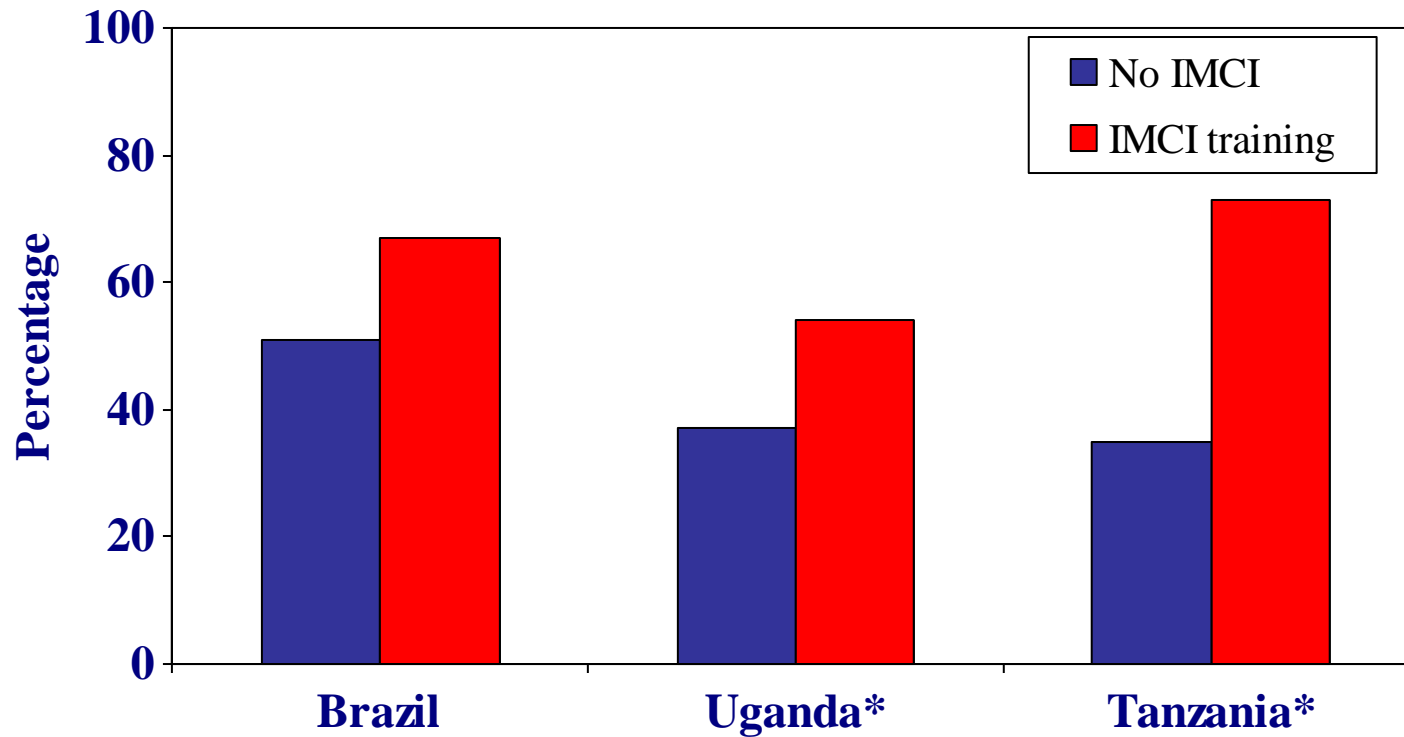
Treatment of Sick Children by HEWs in Ethiopia

Timely and Appropriate Treatment
% of children that received appropriate treatment
Comparison of quality of care for HEWs and higher-level health workers (Ethiopia)



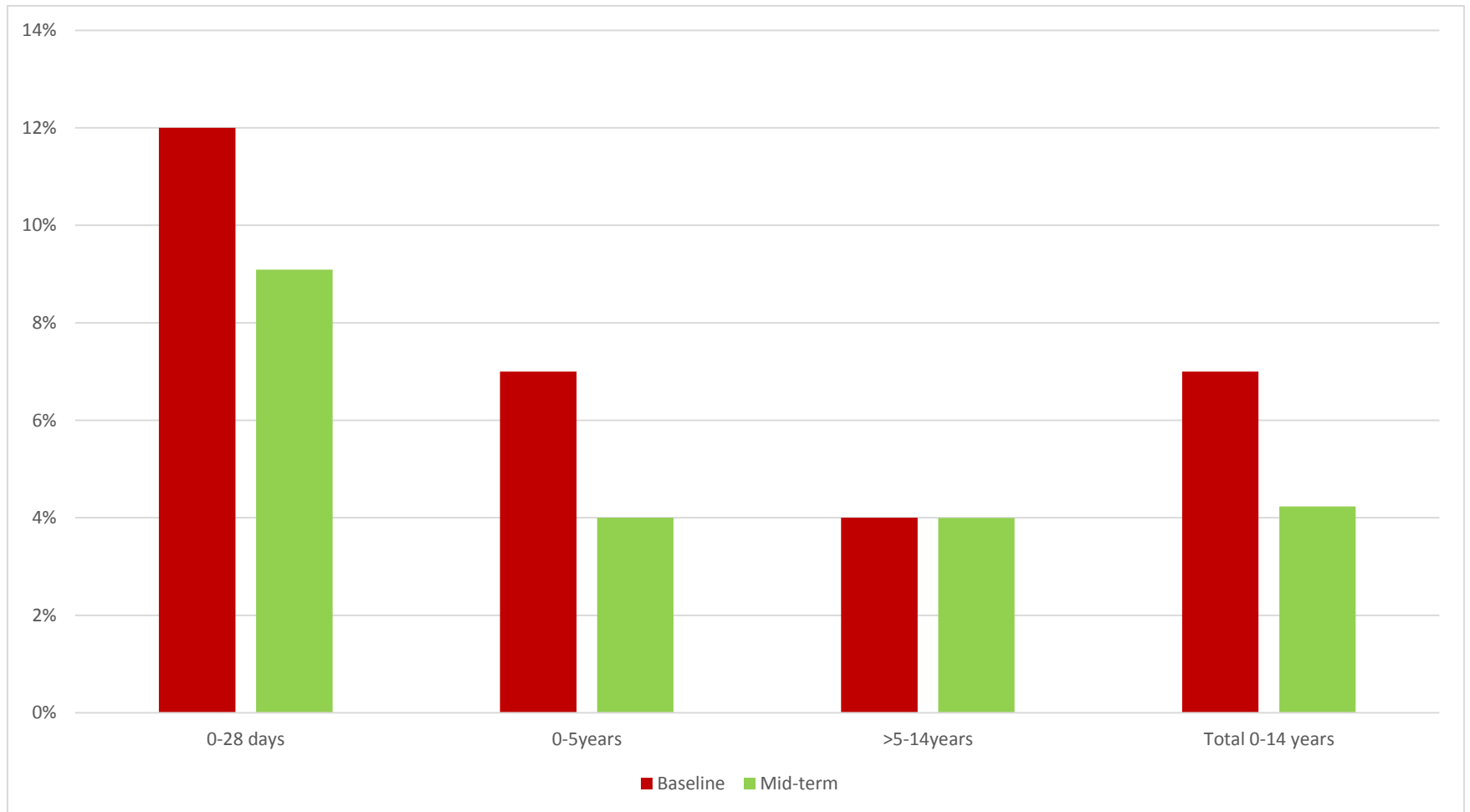
Quality of case management- IMCI

Percentage of children needing antibiotics and/or anti-malarials who were prescribed the drug correctly in IMCI and non-IMCI facilities



* $P < 0.05$

Improved case management in 10 pilot hospitals, Ethiopia, 2013: case fatality



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WHO/UNICEF Joint statements

Diarrhoea



WHO/UNICEF JOINT STATEMENT

CLINICAL MANAGEMENT OF ACUTE DIARRHOEA



Pneumonia



WHO/UNICEF JOINT STATEMENT

MANAGEMENT OF PNEUMONIA IN COMMUNITY SETTINGS



Severe acute malnutrition



WHO/UNICEF JOINT STATEMENT

COMMUNITY BASED MANAGEMENT OF SEVERE ACUTE MALNUTRITION



Home visits for newborn care

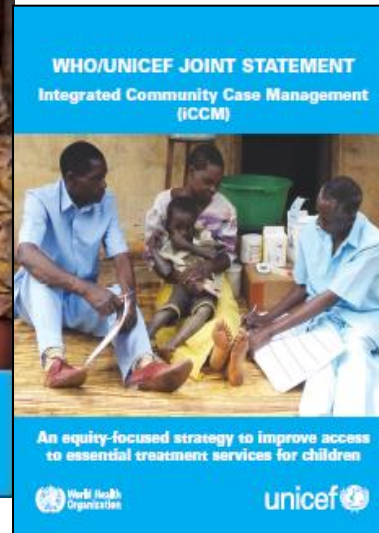


WHO/UNICEF JOINT STATEMENT

Home visits for the newborn child: a strategy to improve survival



Integrated community case management



WHO/UNICEF JOINT STATEMENT

Integrated Community Case Management (ICCM)



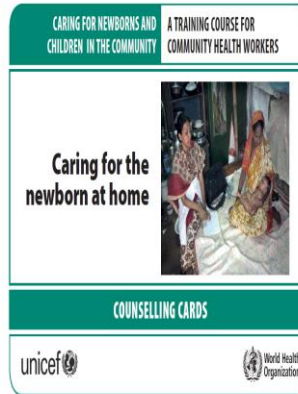
An equity-focused strategy to improve access to essential treatment services for children



Increasing access to community services

Caring for the newborn at home

- Promotion of ANC and skilled care at birth
- Care in first week of life
- Recognition and referral of newborns with danger signs
- Special care for low-birth-weight babies



Caring for the sick child in the community

- Referral of children with danger signs and severe acute malnutrition
- Treatment in the community
 - Diarrhoea
 - Fever (malaria)
 - Pneumonia

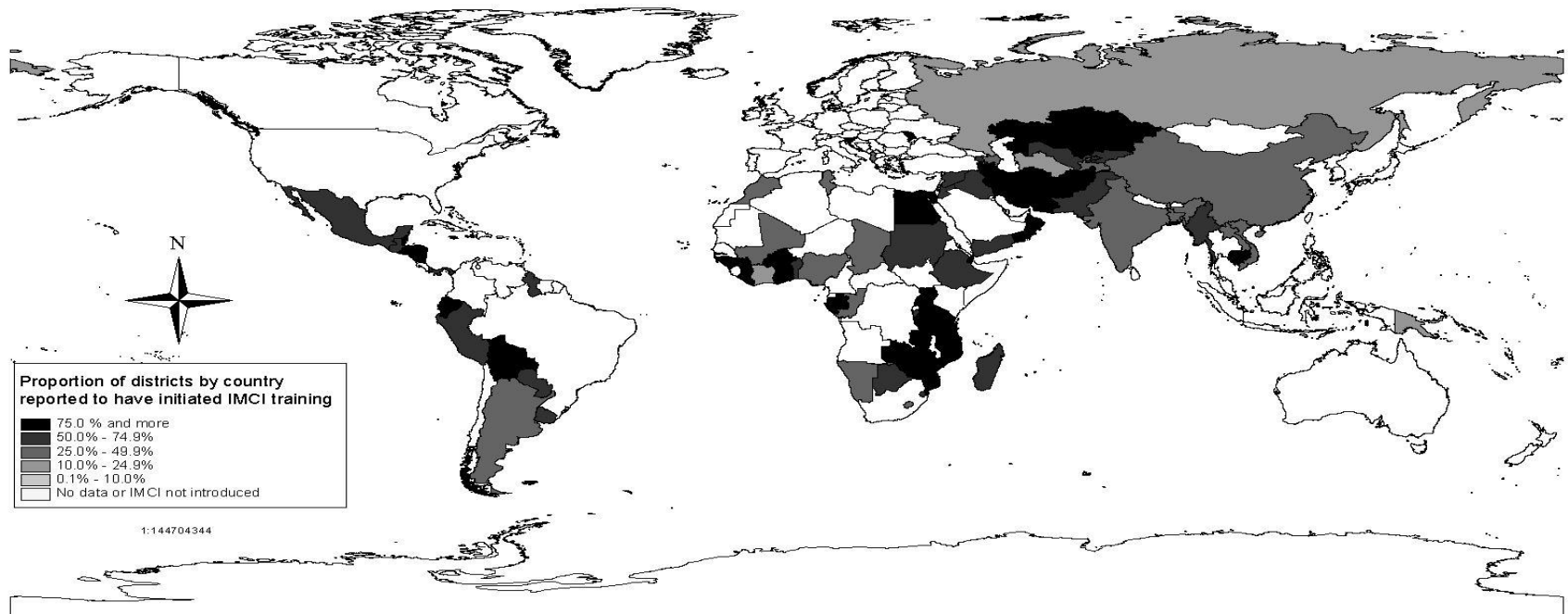


Caring for the child's healthy growth and development

- Care-giving skills and support for child development
- Infant and young child feeding
- Prevention of illness
- Family response to child's illness



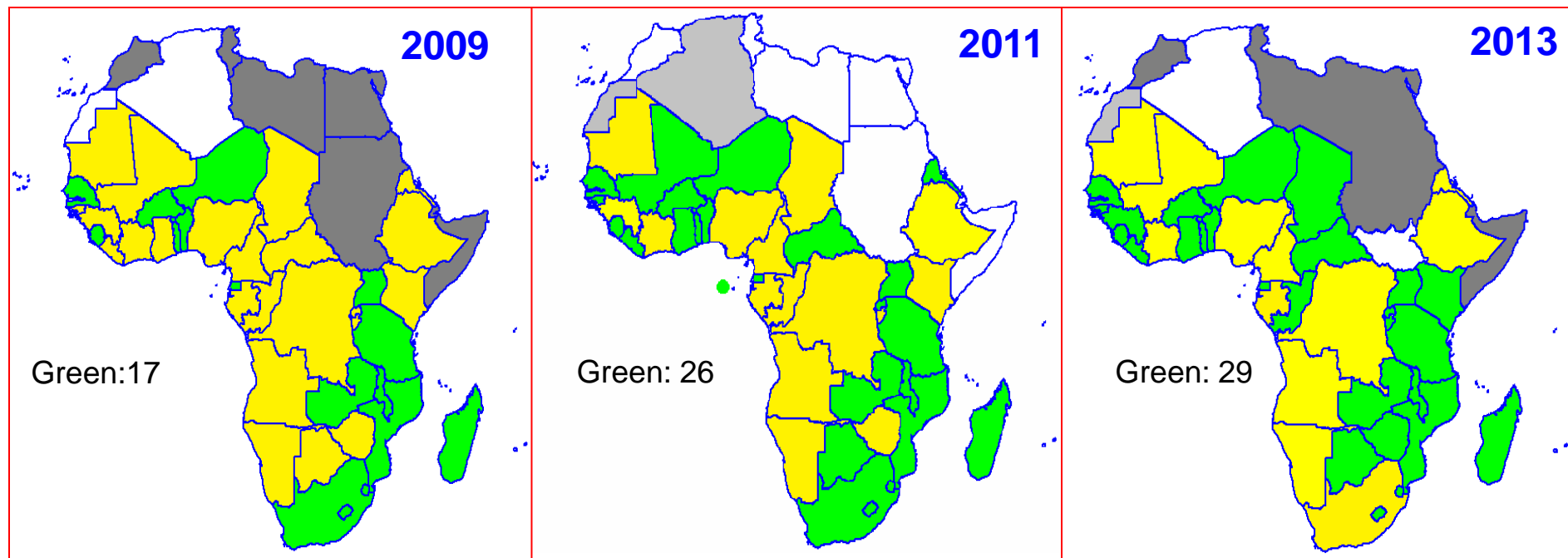
Estimated coverage of training in IMCI as reported by countries by end of 2012



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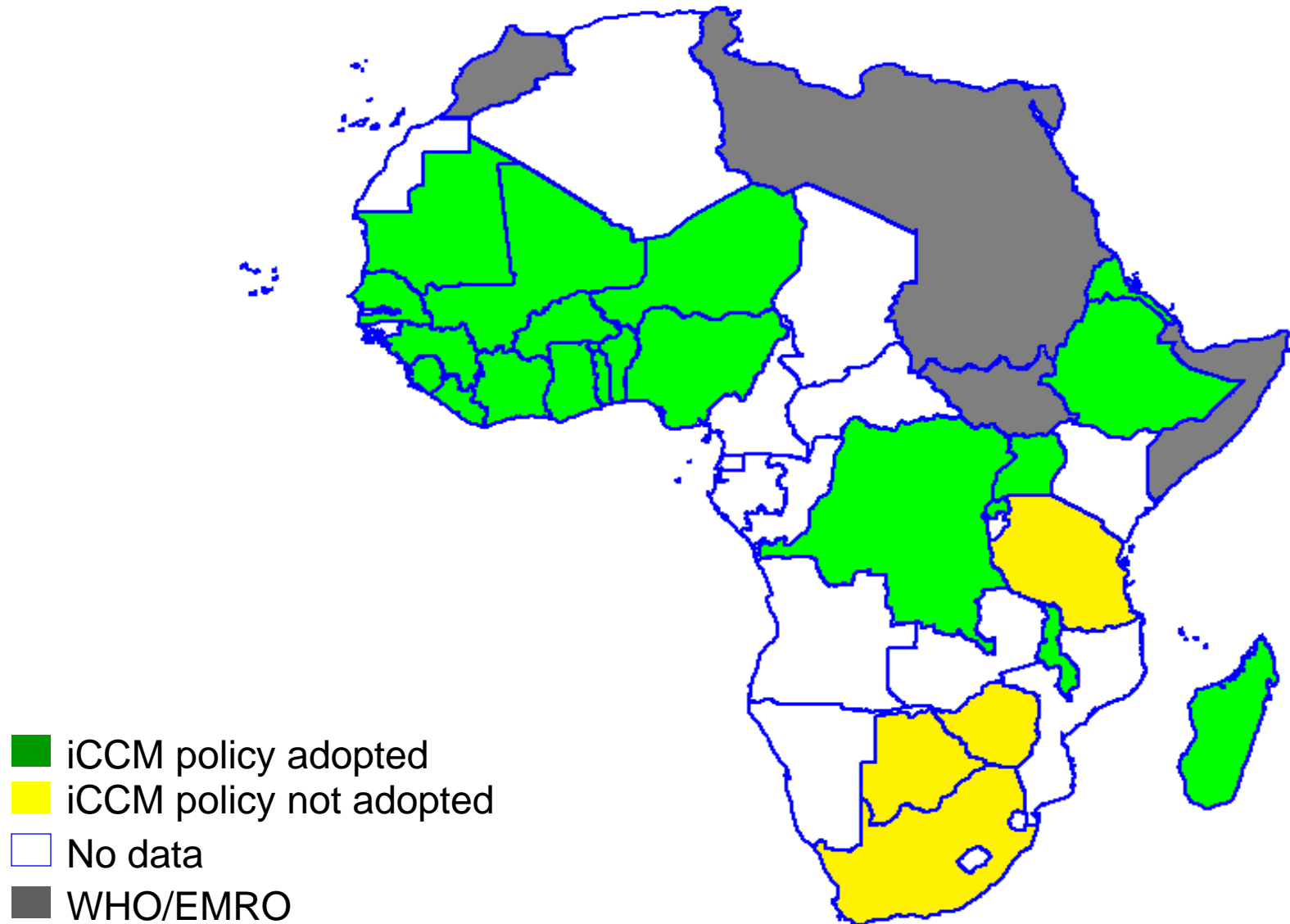
Source : Child and Adolescent Health and Development
World Health Organization

Scale up of IMCI in the African Region

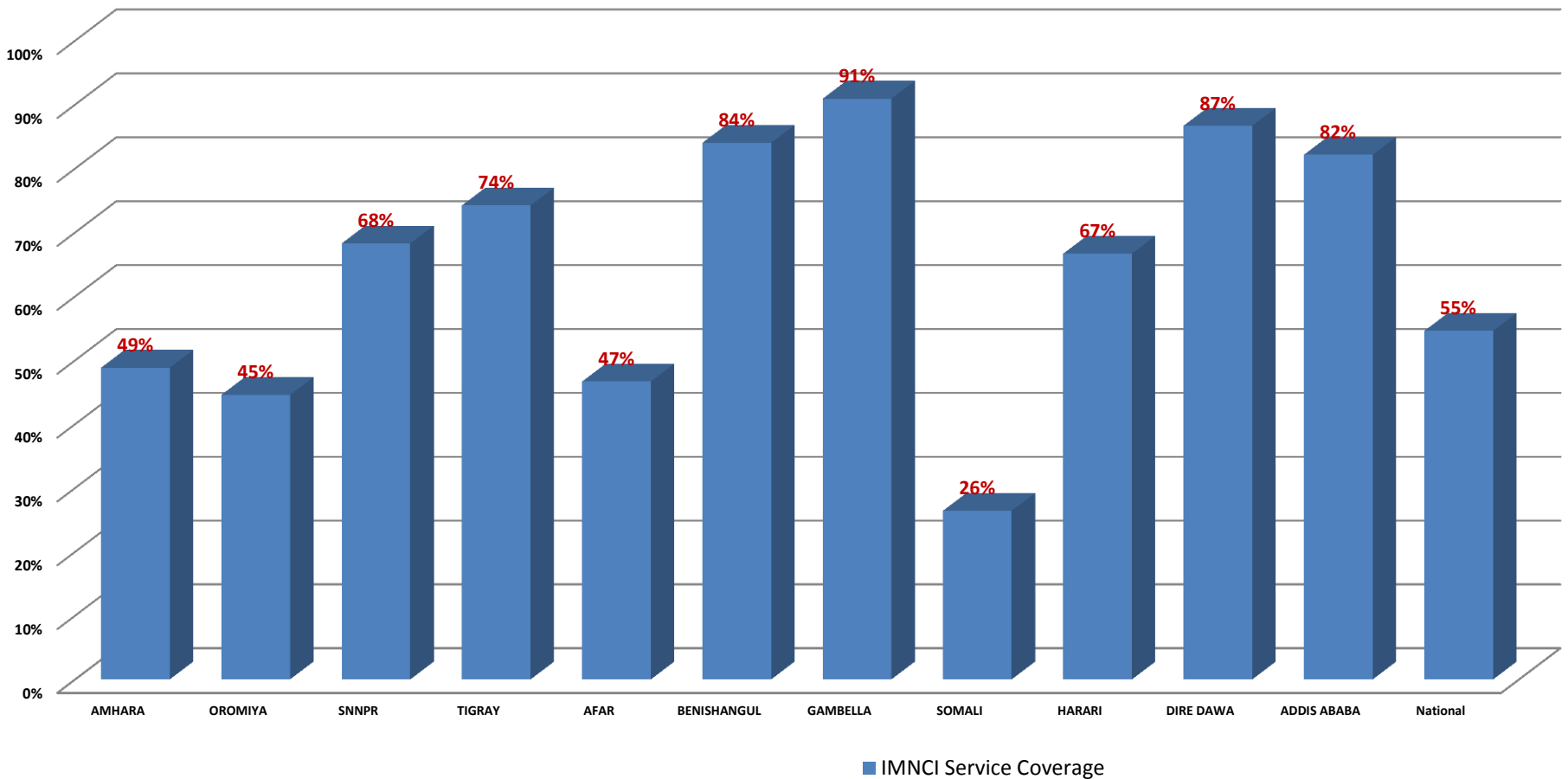


- $\geq 75\%$ of districts implementing IMCI
- $< 75\%$ of districts implementing IMCI
- No data
- WHO/EMRO

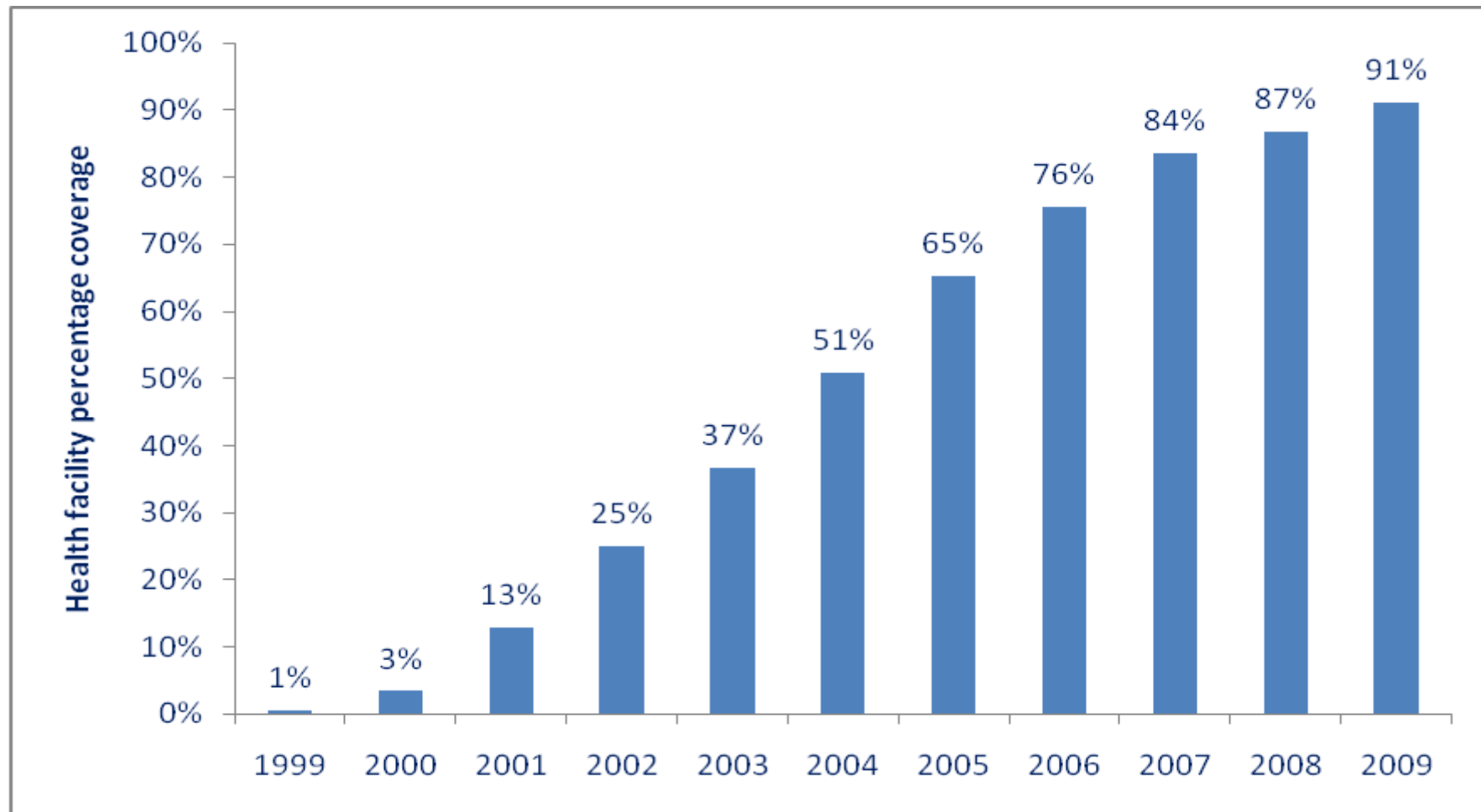
Countries implementing iCCM WHO, African Region, 2012



Ethiopia: IMNCI Service Coverage by Regions, 2011

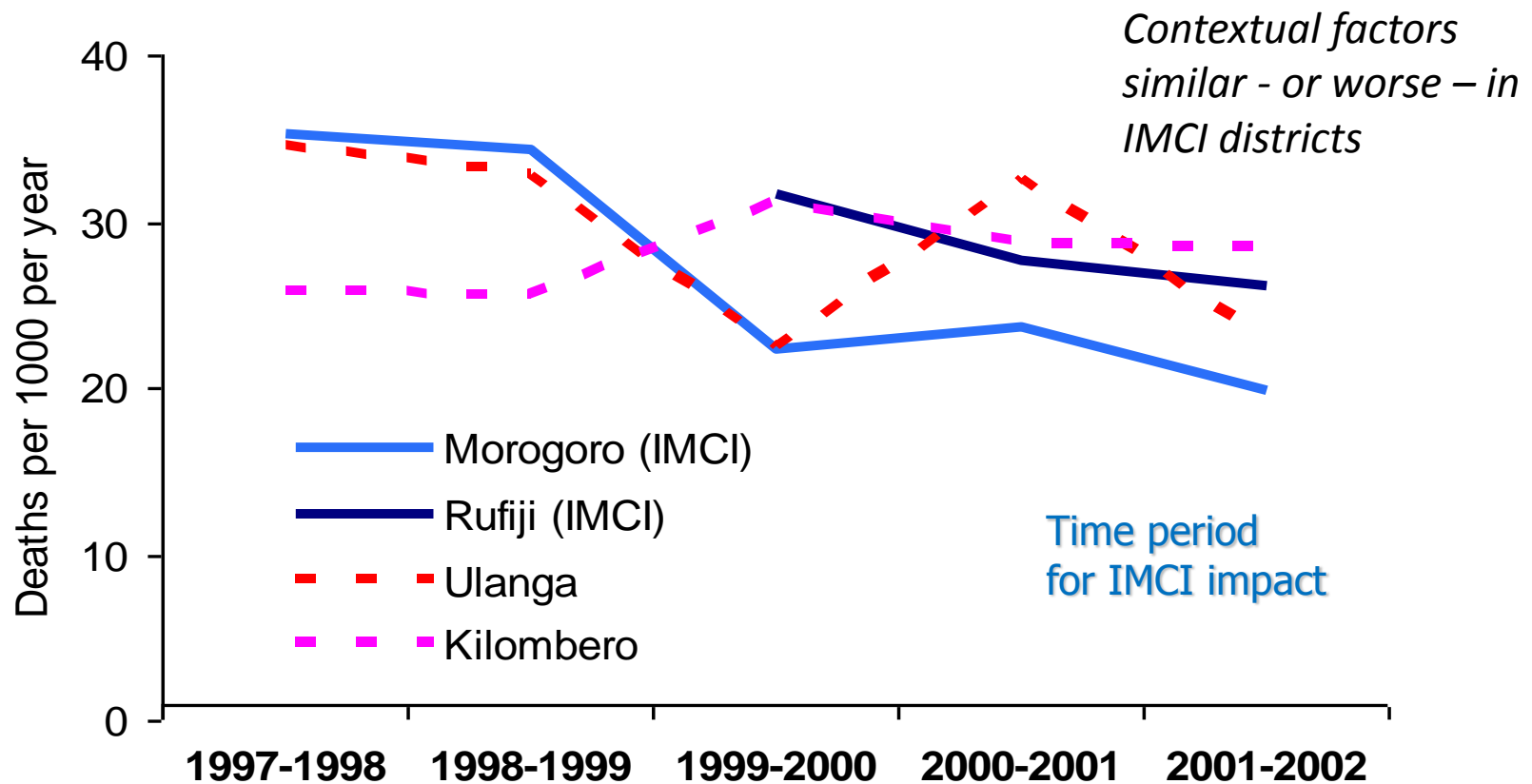


Progress of IMCI implementation at health facility level, Egypt, 1999-2009



IMCI implementation over 2 years in Tanzania reduced mortality by 13%

Under-five mortality rate



Effect of the Integrated Management of Childhood Illness strategy on childhood mortality and nutrition in a rural area in Bangladesh: a cluster randomised trial

Lancet 2009; 374: 393-403

Findings The yearly rate of mortality reduction in children younger than 5 years (excluding deaths in first week of life) was similar in IMCI and comparison areas (8.6% vs 7.8%). In the last 2 years of the study, the mortality rate was 13.4% lower in IMCI than in comparison areas (95% CI -14.2 to 34.3), corresponding to 4.2 fewer deaths per 1000 livebirths (95% CI -4.1 to 12.4; $p=0.30$). Implementation of IMCI led to improved health-worker skills, health-system support, and family and community practices, translating into increased care-seeking for illnesses. In IMCI areas, more children younger than 6 months were exclusively breastfed (76% vs 65%, difference of differences 10.1%, 95% CI 2.65-17.62), and prevalence of stunting in children aged 24-59 months decreased more rapidly (difference of differences -7.33, 95% CI -13.83 to -0.83) than in comparison areas.

Interpretation IMCI was associated with positive changes in all input, output, and outcome indicators, including increased exclusive breastfeeding and decreased stunting. However, IMCI implementation had no effect on mortality within the timeframe of the assessment.

IMNCI impact in Haryana, India

BMJ 2012;344:e1634 doi:10.1136/bmj.e1634

- 15% reduction in infant mortality; 23% among home births
- 14% reduction in neonatal mortality (after first day); 24% among home births
- Mortality impact supported by a substantial effect on:
 - early and exclusive breastfeeding, cord care
 - diarrhoea and pneumonia prevalence
 - timely & appropriate care seeking for illness

IMCI scale-up reduced child mortality in Egypt

Across 213 districts, the estimated annual rate of decline in under-five mortality was:
3.3% before compared with
6.3% after IMCI implementation ($p=0.0001$).

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What Remains? Coverage with Quality

- **Overcoming systems barriers** – policy, HR, logistics and supplies, monitoring and support supervision, innovations
- Ensuring the **continuum of care** across all levels of service delivery -*Protect, Prevent and Treat*
- **Maximizing on opportunities and creating synergies**
- **Accountability** – review, remedy and act



THANK YOU