

# Improving Nutrition Services in the Care of the Ill and Vulnerable Newborn and Child

Anne Detjen, UNICEF, New York

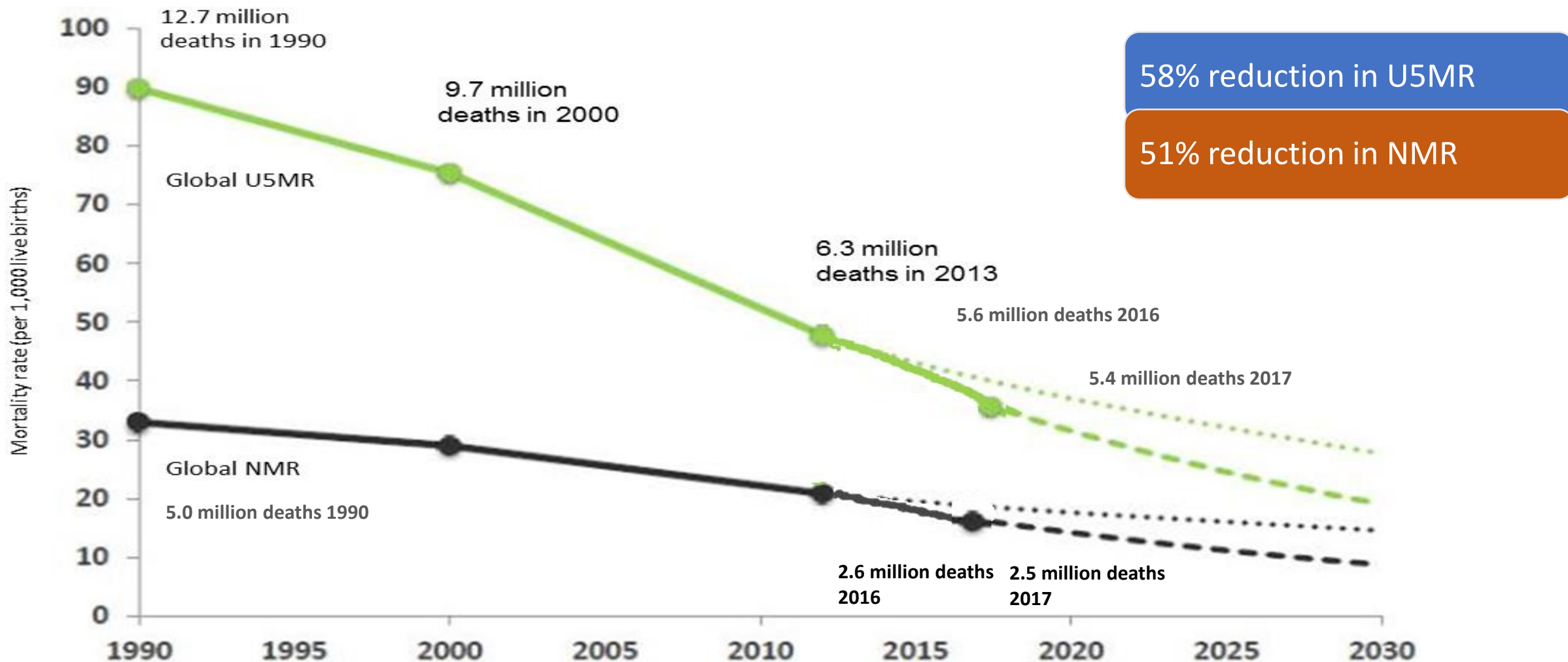
Nigel Rollins, World Health Organization, Geneva

The  
world ...



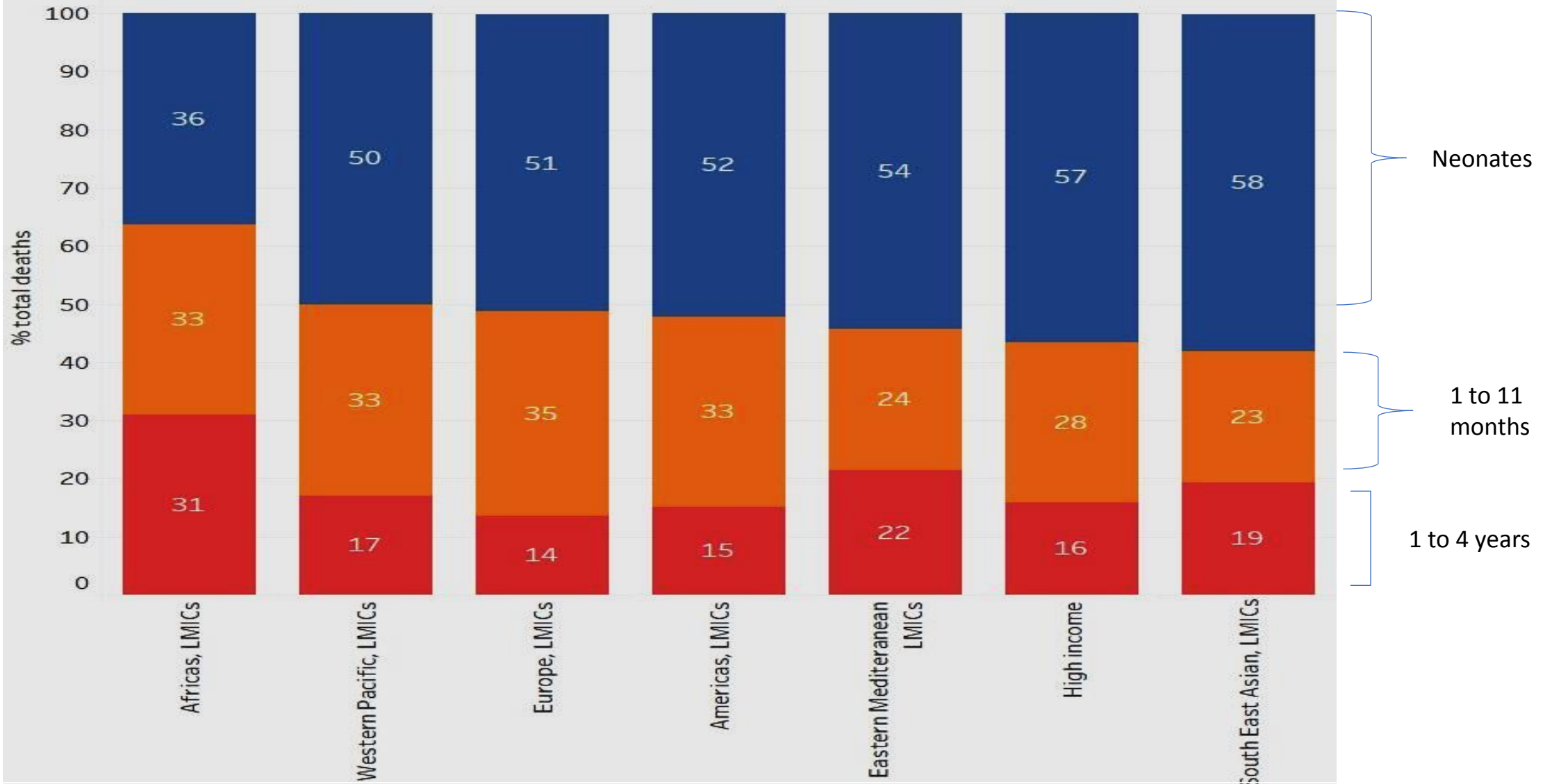
and child  
health  
are  
changing

# Under-5 mortality in 2017: Success but significant unfinished agenda



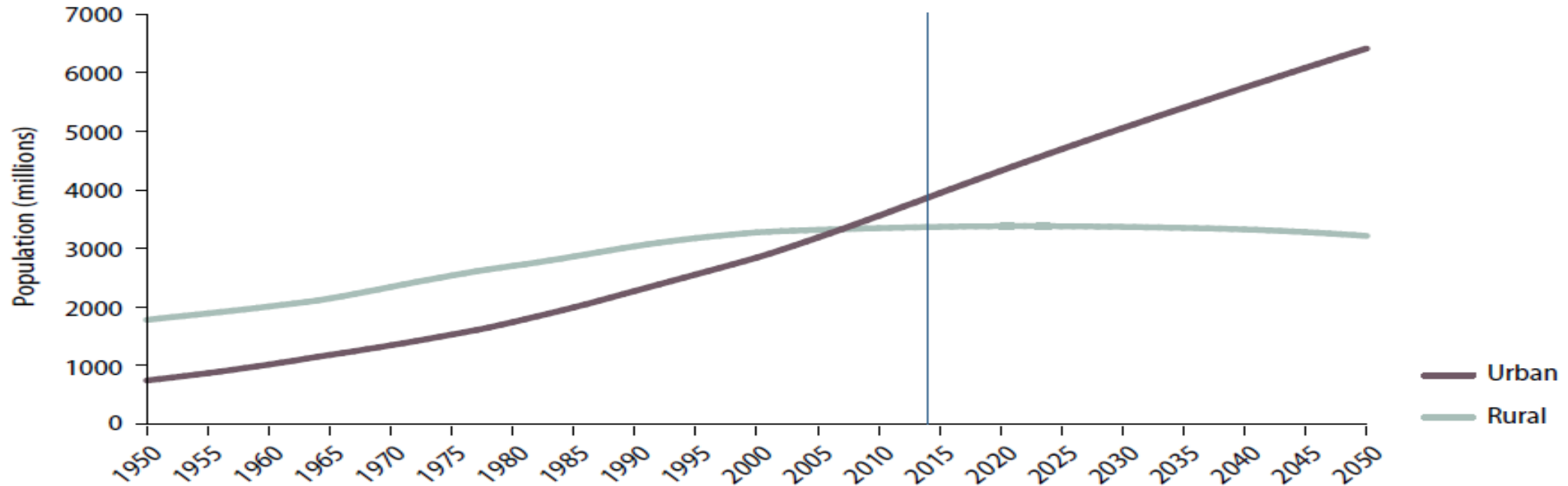
Nutrition related factors contribute to 45% of deaths in children under 5 years. Malnourished children die at higher rates from diarrhoea, pneumonia and malaria

# Per cent of total deaths by region and by age group, modified WHO regions, 2016



**Neonatal deaths are a greater percentage of all deaths across 6 out of 7 modified regions**  
**For African LMICs, all three age categories have the same percent of total deaths**

# The world is urban (urban and rural population 1950 – 2050)




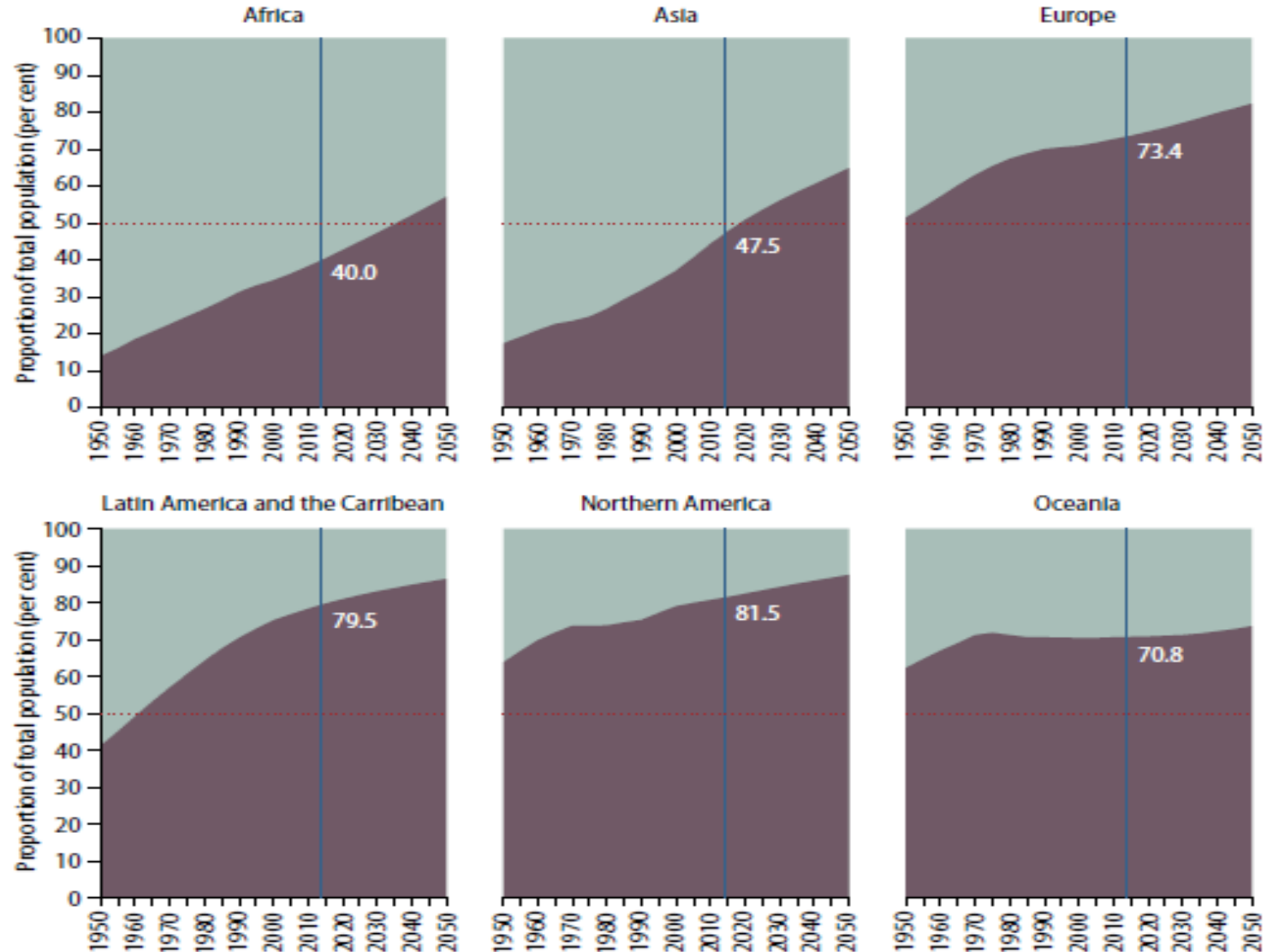
- 54 per cent of the world's population residing in urban areas in 2014.
- In 1950, 30 per cent of the world's population was urban
- By 2050, 66 per cent of the world's population is projected to be urban.
- The rural population has grown since 1950 and will soon peak at 3.4 billion and then decrease to 3.2 billion



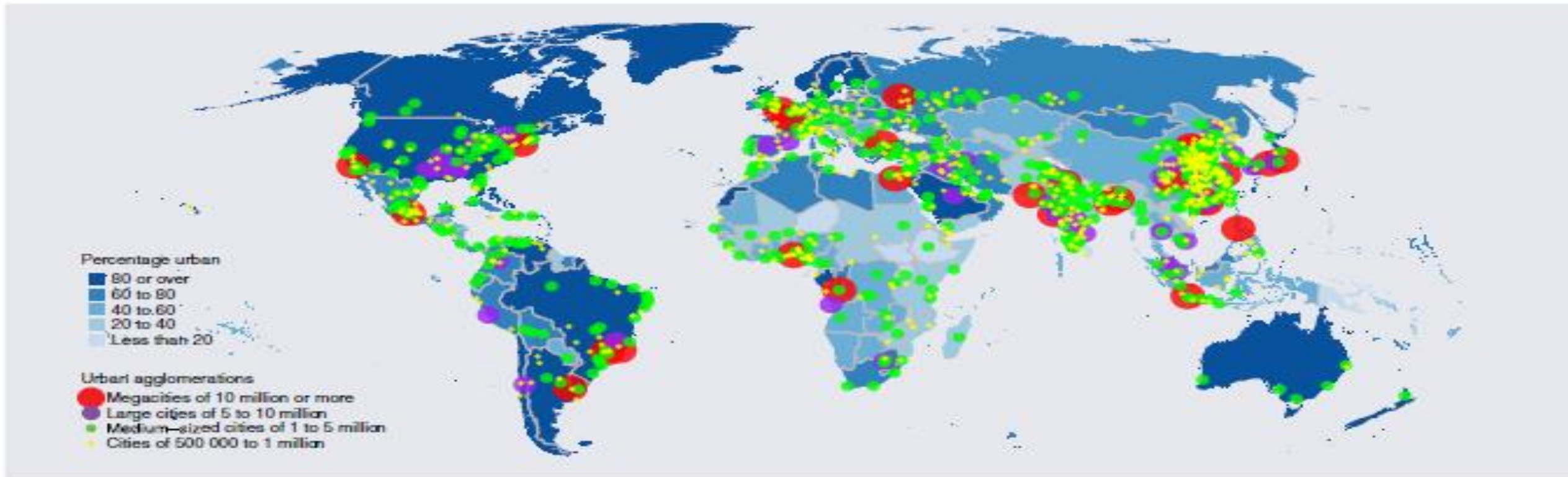
# Urban and rural population as proportion of total population, by area. 1950 - 2050

- Urbanisation has occurred in all areas yet Africa and Asia remain mostly rural .... for now

Urban population   
Rural population 



# Percentage urban and location of urban agglomerations with at least 500,000 inhabitants. 2014



- Upper, middle income countries have experience the fastest pace of urbanisation

# Private sector engagement

- **Both the public and private sectors are important sources of sick child care.**
- **The private sector serves the poor as well as the wealthy.** Two in five caregivers from the poorest households and three in five caregivers from the wealthiest households rely on the private sector for sick child care.
- **96% of public sector care seekers seek care from a clinical facility,** not from a community healthworker.

On average across the 24 priority countries and among all caregivers who seek sick child care outside the home, **50%** seek treatment or advice from public sector sources and **43%** from private sector sources.

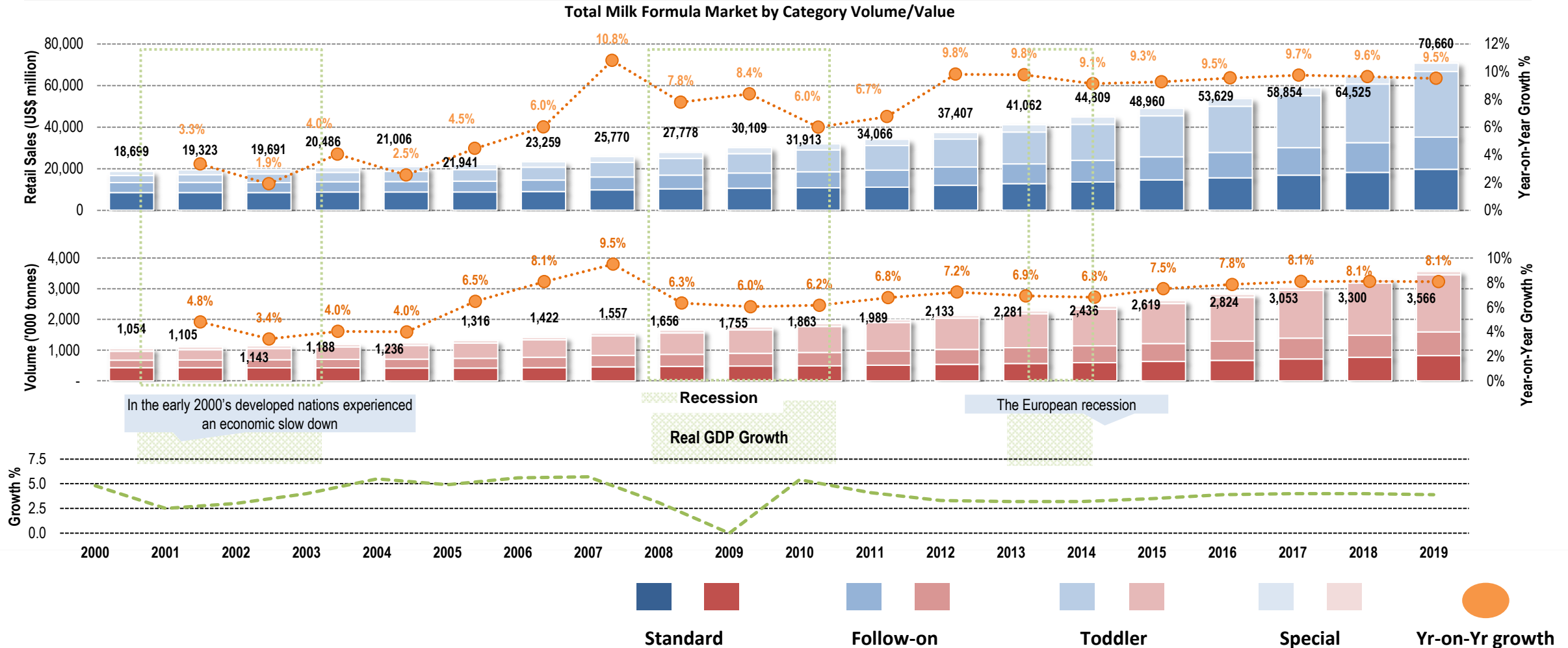


■ Public source ■ Private source ■ Both ■ Other



# The breast milk substitute (BMS) industry is large and growing

- In 2014, global sales of all baby milk formula were about US\$ 44.8 billion
- By 2019, the market value is projected to reach US\$ 70.6 billion.



# Disasters, Emergencies and Fragile states

(alphabetical order)

- Drought
- Earthquakes
- Ebola
- Famine
- Migrants
- Tsunamis
- War
- Zika



Effects on this and  
future generations  
not quantified

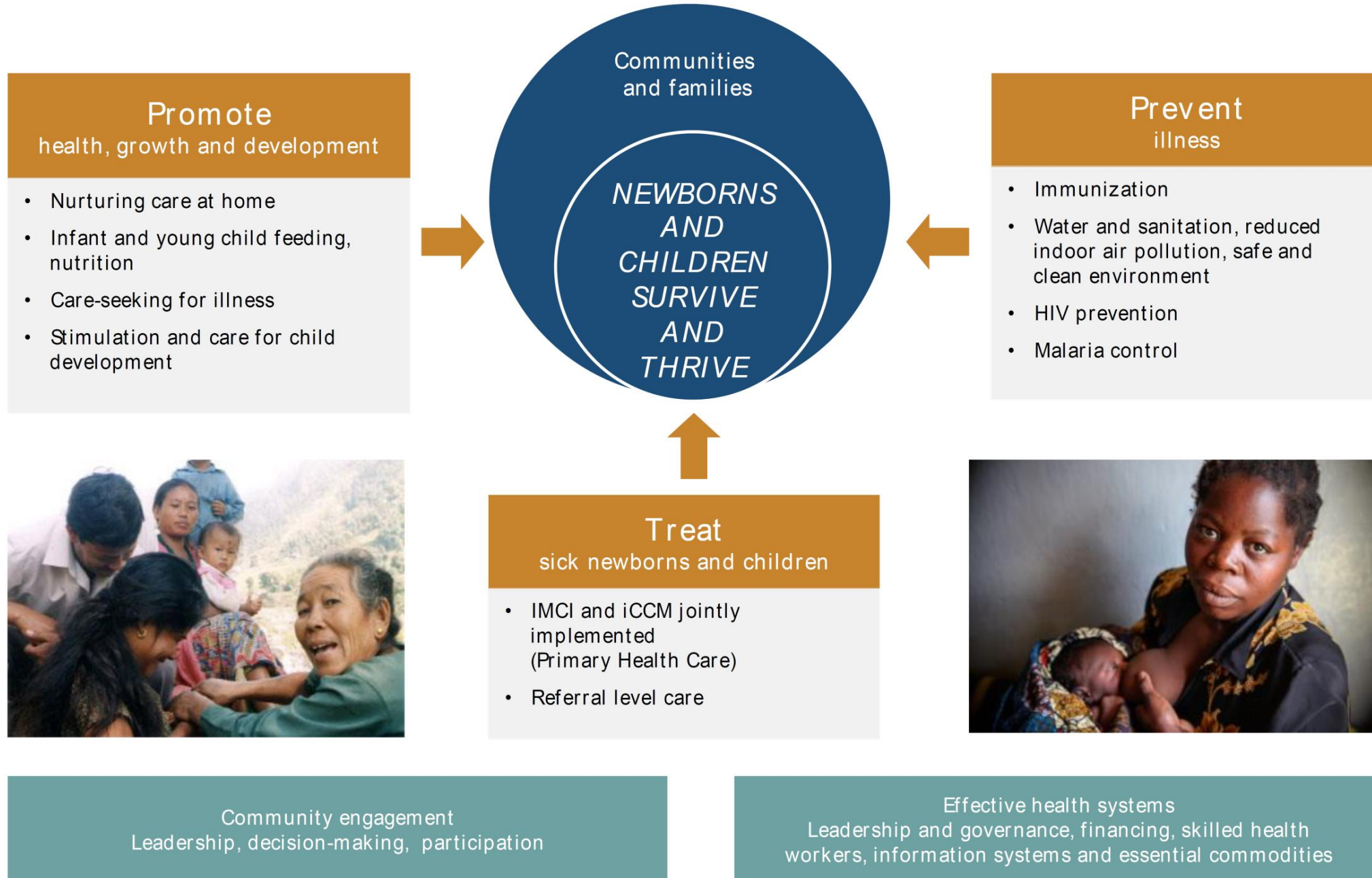
# Looking forward ...



The United Nations Sustainable Development Summit for the adoption of the post-2015 development agenda and the **Sustainable Development Goals** will be held from 25 to 27 September 2015 in New York and convened as a high-level plenary meeting of the General Assembly.

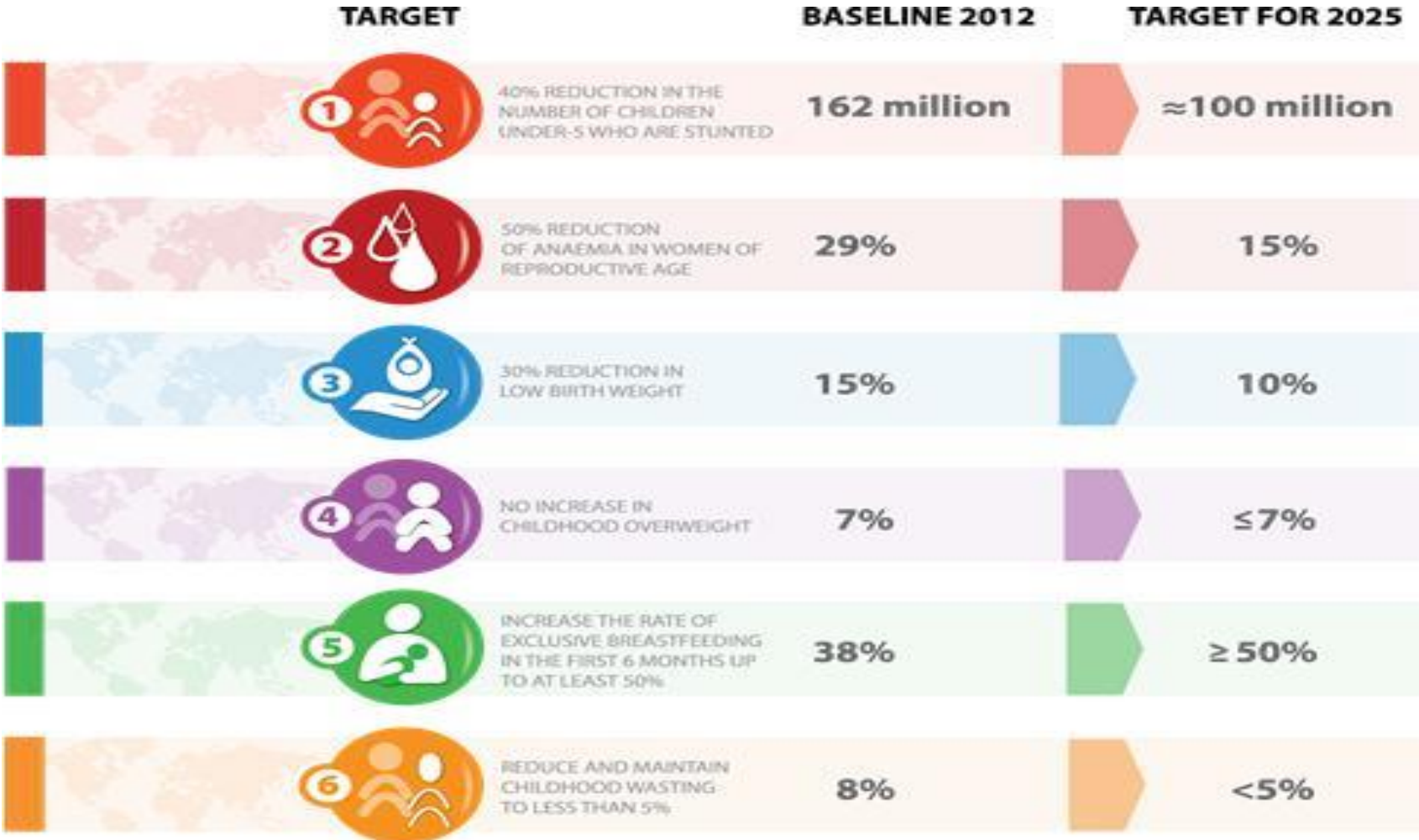


# Achieving the SDGs for child health





# World Health Assembly Global Nutrition Targets







EVERY WOMAN  
EVERY CHILD

**THE GLOBAL STRATEGY  
FOR WOMEN'S,  
CHILDREN'S AND  
ADOLESCENTS' HEALTH  
(2016-2030)**

**SURVIVE THRIVE TRANSFORM**





EVERY WOMAN  
EVERY CHILD

## Objectives

### 1. SURVIVE

End preventable deaths



### 2. THRIVE

Ensure health and well-being



### 3. TRANSFORM

Expand enabling environments

# Nurturing care for early childhood development:

*A framework for linking survive and thrive to promote health and human potential*

- The early years, starting from conception, are a period of special sensitivity for child development
- The most formative experience of young children come from NURTURING CARE
- Early investment has lifelong and intergenerational benefits
- Policies, information and services are important
- Multisectoral collaboration is essential and the health sector has a special role to play





# The Nurturing Care framework

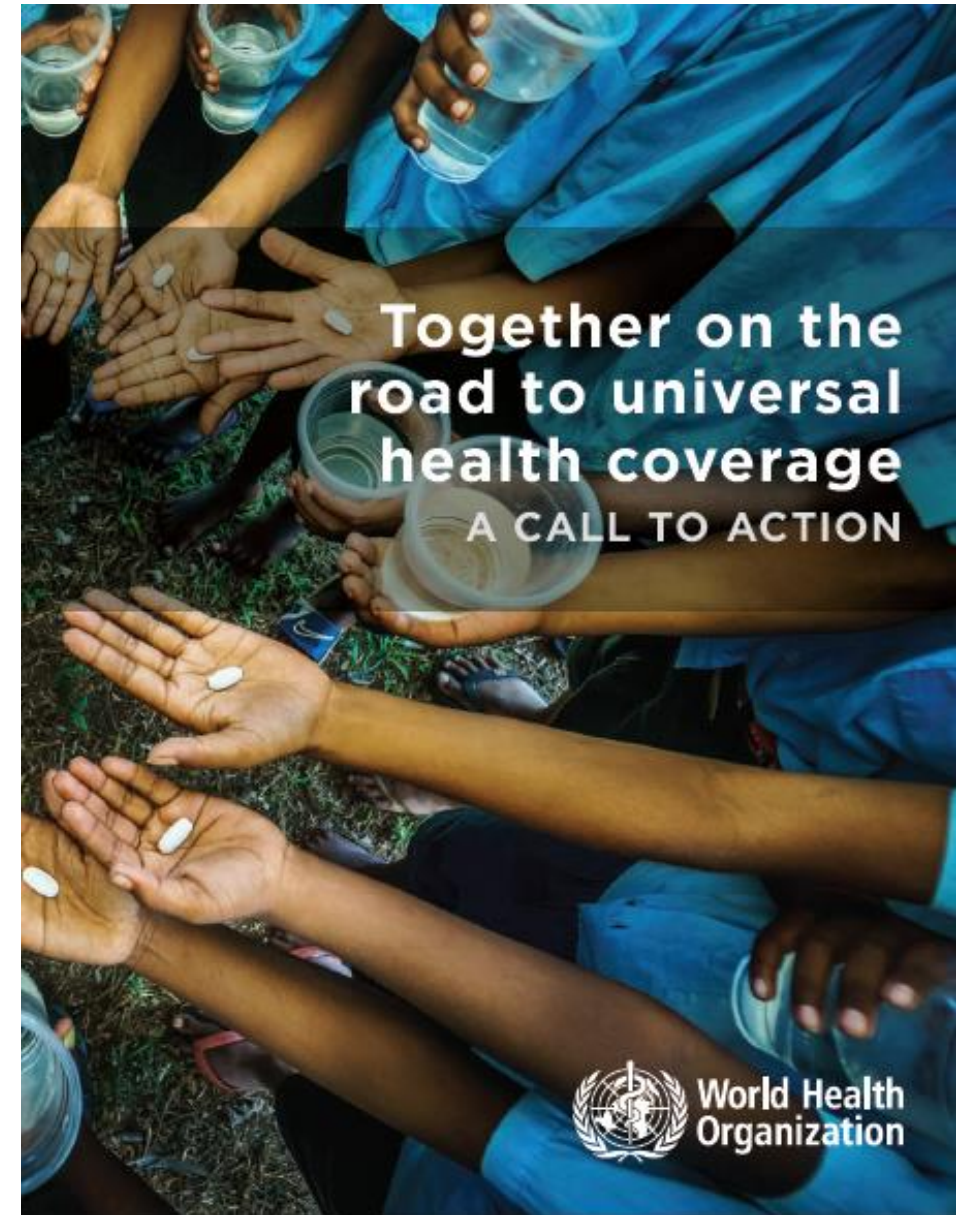


# Primary health care revisited Astana. 25-26 October 2018

## From Alma-Ata towards Universal Health Coverage and the Sustainable Development Goals

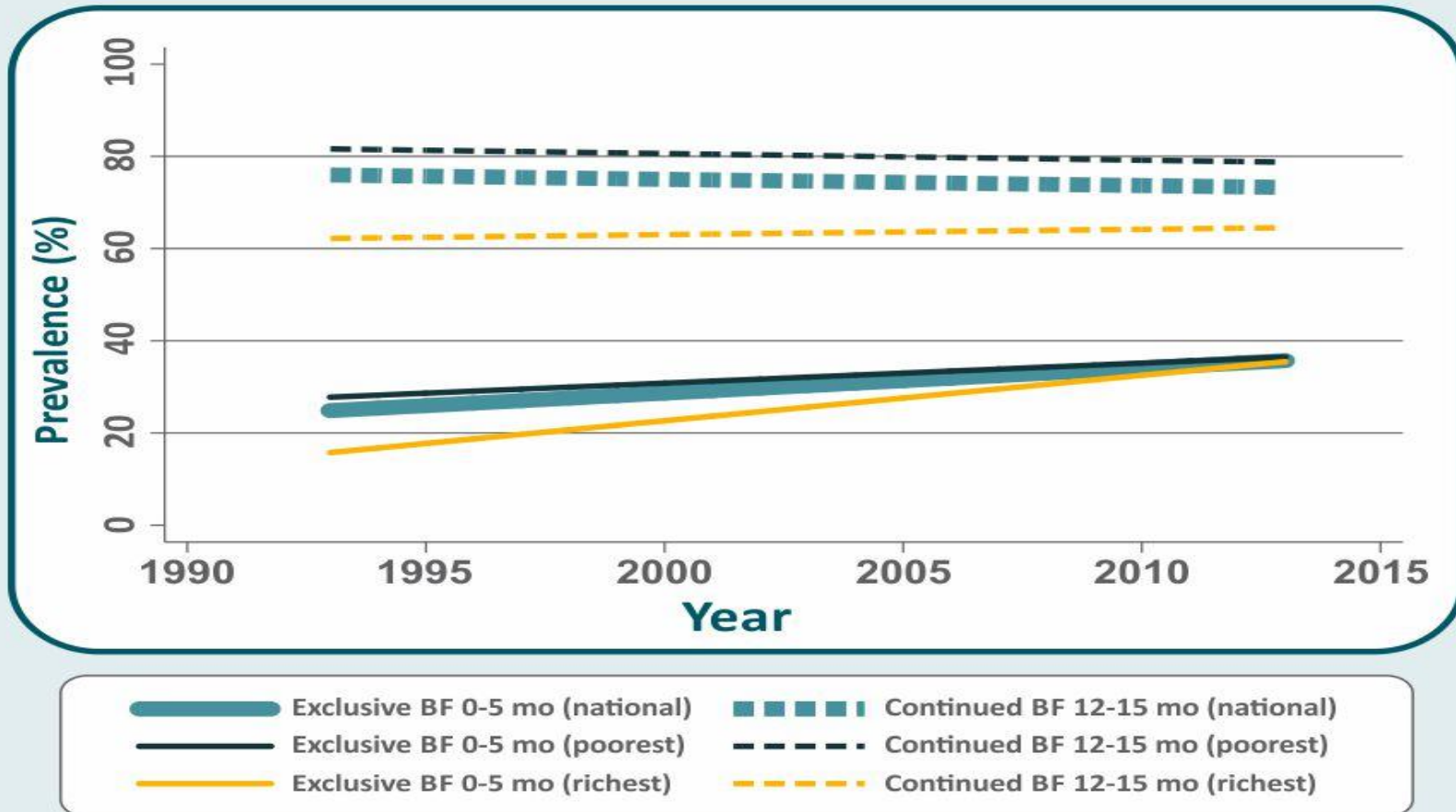
To address the health and development challenges of the modern era, we need PHC that:

- empowers people and communities as owners of their health, as advocates for the policies that promote and protect it, and as architects of the health and social services that contribute to it;
- addresses the social, economic, environmental and commercial determinants of health through evidence-based policies and actions across all sectors; and
- ensures strong public health and primary care throughout people's lives, as the core of integrated service delivery





# Breastfeeding practices over time and economic development



For each doubling in national GDP per capita, breastfeeding prevalence at 12 months decreases by 10 percentage points

# Bangladesh, Ethiopia and Viet Nam

Alive and Thrive 2015



Interpersonal  
communication

+



Mass communication

=

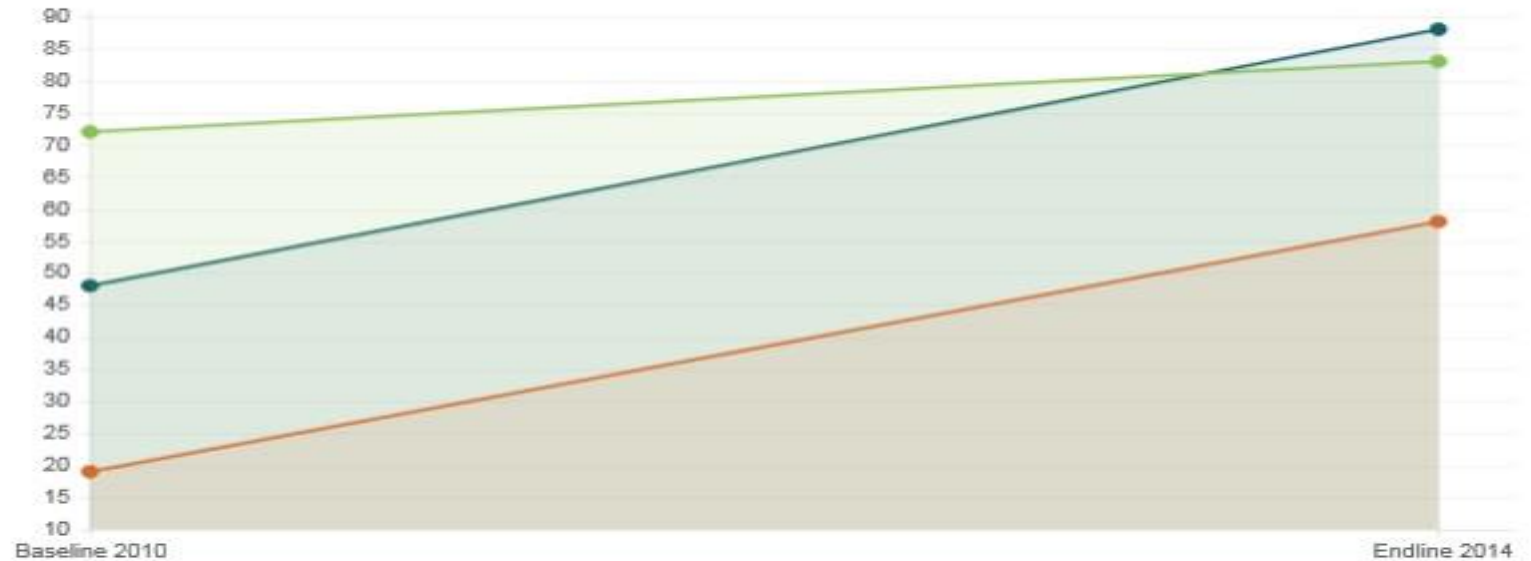


Greater improvements in  
feeding practices

Exclusive breastfeeding improved in all three countries. The rate **tripled in Viet Nam** and reached more than **80% in Bangladesh and Ethiopia**.



Exclusive breastfeeding means giving breastmilk only and no other foods or fluids for the first six months.



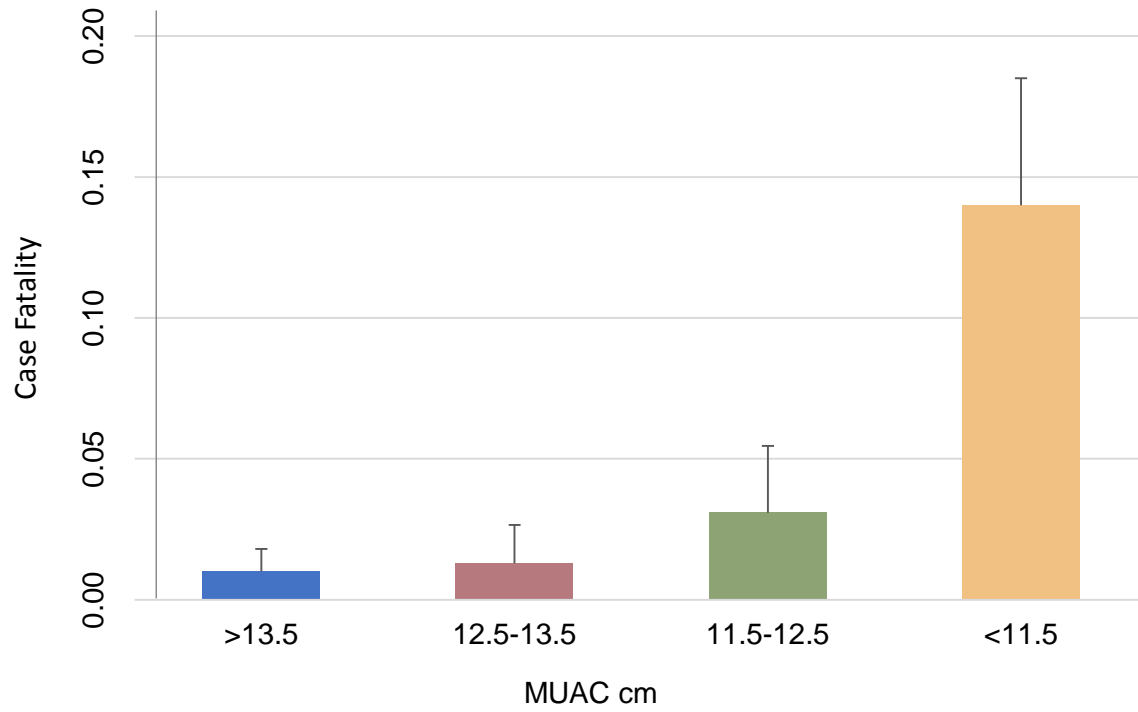


The Childhood Acute Illness & Nutrition Network

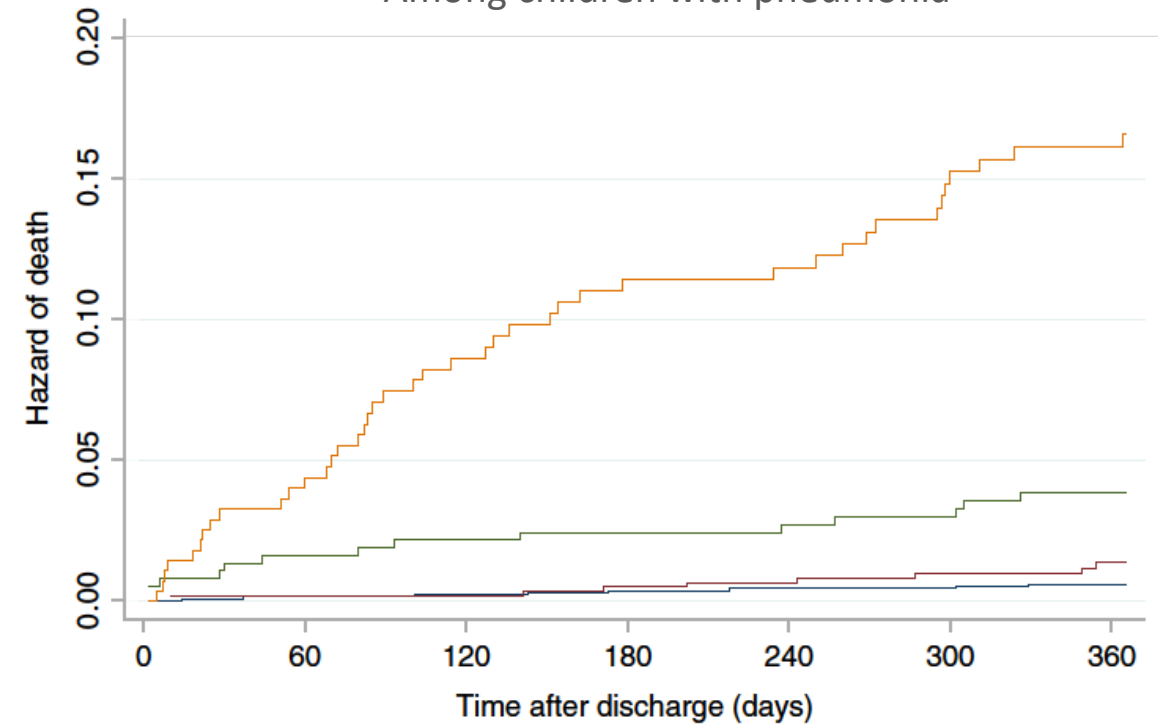
James A Berkley



Inpatient case fatality among children admitted to hospital with pneumonia



Mortality risk after discharge from hospital  
Among children with pneumonia



# HOW POVERTY AFFECTS THE BRAIN

An unprecedented study  
in Bangladesh could  
reveal how malnutrition,  
poor sanitation and  
other challenges make  
their mark on child  
development.

BY CARINA STORRS



**I**n the late 1960s, a team of researchers began doling out a nutritional supplement to families with young children in rural Guatemala. They were testing the assumption that providing enough protein in the first few years of life would reduce the incidence of stunted growth.

It did. Children who got supplements grew 1 to 2 centimetres taller than those in a control group. But the benefits didn't stop there. The children who received added nutrition went on to score higher on reading and knowledge tests as adolescents, and when researchers returned in the early 2000s, women who had received the supplements in the first three years of life completed more years of schooling and men had higher incomes.

"Had there not been these follow-ups, this

study probably would have been largely forgotten," says Reynaldo Martorell, a specialist in maternal and child nutrition at Emory University in Atlanta, Georgia, who led the follow-up studies. Instead, he says, the findings made financial institutions such as the World Bank think of early nutritional interventions as long-term investments in human health.

Since the Guatemalan research, studies around the world — in Brazil, Peru, Jamaica, the Philippines, Kenya and Zimbabwe — have all associated poor or stunted growth in young children with lower cognitive test scores and worse school achievement.

A picture slowly emerged that being too short early in life is a sign of adverse conditions — such as poor diet and regular bouts of diarrhoeal disease — and a predictor for intellectual deficits and mortality. But not all stunted

growth, which affects an estimated 160 million children worldwide, is connected with these bad outcomes. Now, researchers are trying to untangle the links between growth and neurological development. Is bad nutrition alone the culprit? What about emotional neglect, infectious disease or other challenges?

Shahria Hafiz Kakon is at the front line trying to answer these questions in the slums of Dhaka, Bangladesh, where about 40% of children have stunted growth by the age of two. As a medical officer at the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr) in Dhaka, she is leading the first-ever brain-imaging study of children with stunted growth. "It is a very new idea in Bangladesh to do brain-imaging studies," says Kakon.

The research is innovative in other respects, too. Funded by the Bill & Melinda Gates

# Growth trajectories and coronary events in adulthood

- 8760 people born in Helsinki 1934-1944 in whom childhood growth had been recorded
- 357 men and 87 women admitted or died with coronary heart disease
- Risk factors measured in 2003 people



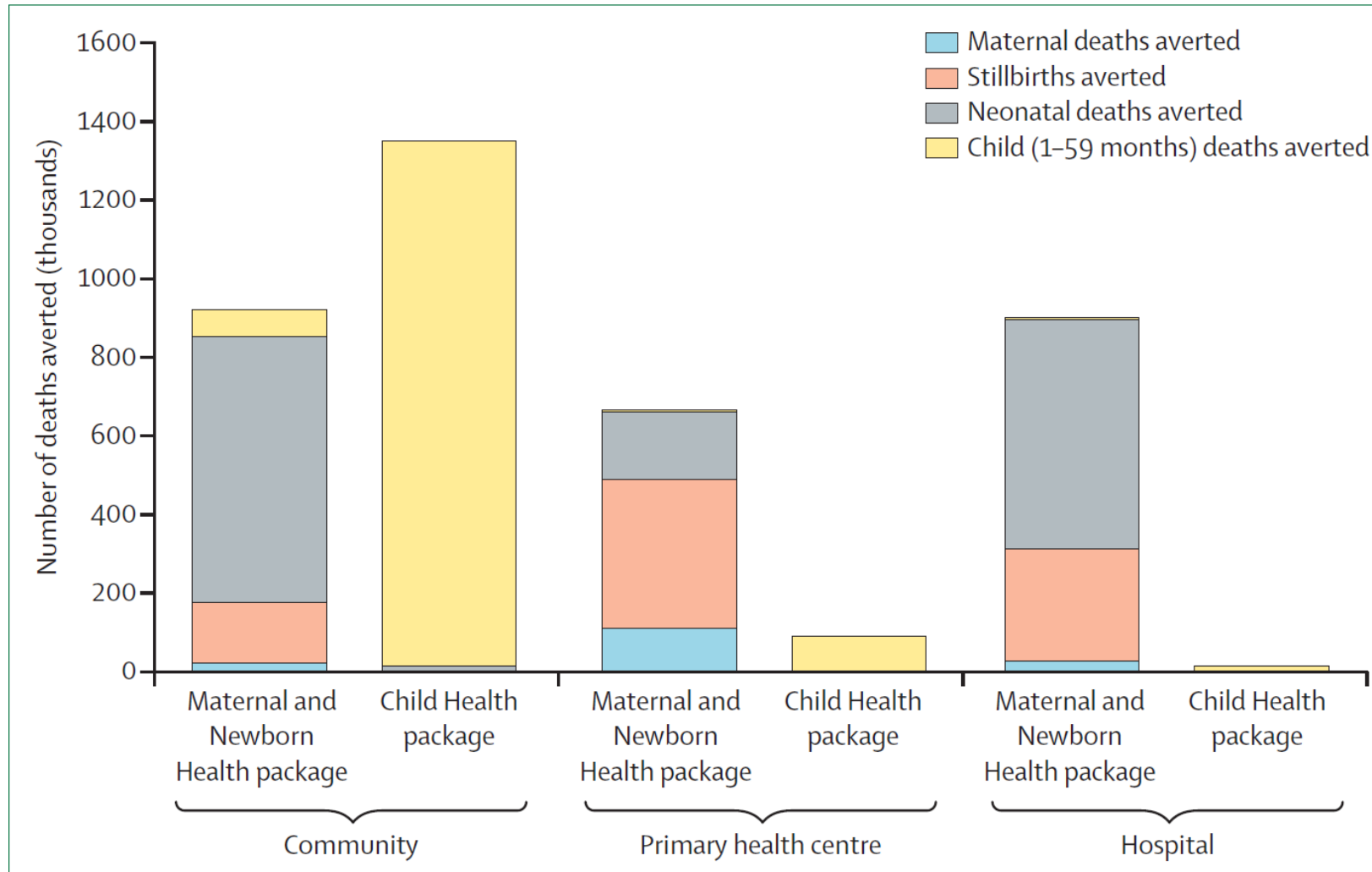
- **Children who later had coronary events:**
  - Smaller at birth
  - At 2 years were thin
  - BMI increased relative to that of other children
  - Low BMI at 2 years and increased BMI between 2-11 years associated with raised fasting insulin as adults (p<0.001 for both)



- We want children to Survive and to achieve their full developmental potential – to Thrive and Transform
- Mortality in children happens mainly in the first two years – and nutrition remains a major consideration
- Interventions and facility care is not enough ..... without coverage and the quality of care (no intervention without a system)



# Implementing comprehensive packages at community and PHC facilities averts preventable deaths



# Essential interventions for child health

Community or health post*	Primary health centre†	First-level and referral hospitals‡
1 Promote breastfeeding or complementary feeding§		
2 Provide vitamin A, zinc, and food supplementation§		
3 Immunisations§¶		
4 Co-trimoxazole for HIV-positive children§	1 ART for HIV-positive children§	
5 Education on safe disposal of children's stools and handwashing§		
6 Distribute and promote use of ITNs or IRS, or both§		
7 Detect and refer children with severe acute malnutrition§	2 Treat severe acute malnutrition§	1 Treat severe acute malnutrition associated with serious infection§
8 Detect and treat serious infections without danger signs (iCCM  ); refer if danger signs appear§	3 Detect and treat serious infections with danger signs (IMCI**)§	2 Detect and treat serious infections with danger signs with full supportive care§

	Pregnancy	Birth	Infancy	Early Childhood	Middle Childhood	Adolescence
Routine entry points	ANC 8	Immunization (I)	I: 6, 10, 14 weeks	I: (9-)12 months	I: ~9 years School	School

Healthy child

MISSED OPPORTUNITIES  
PREVENTION, PROMOTION, COUNSELING

Vulnerable child

Needs based care and counseling

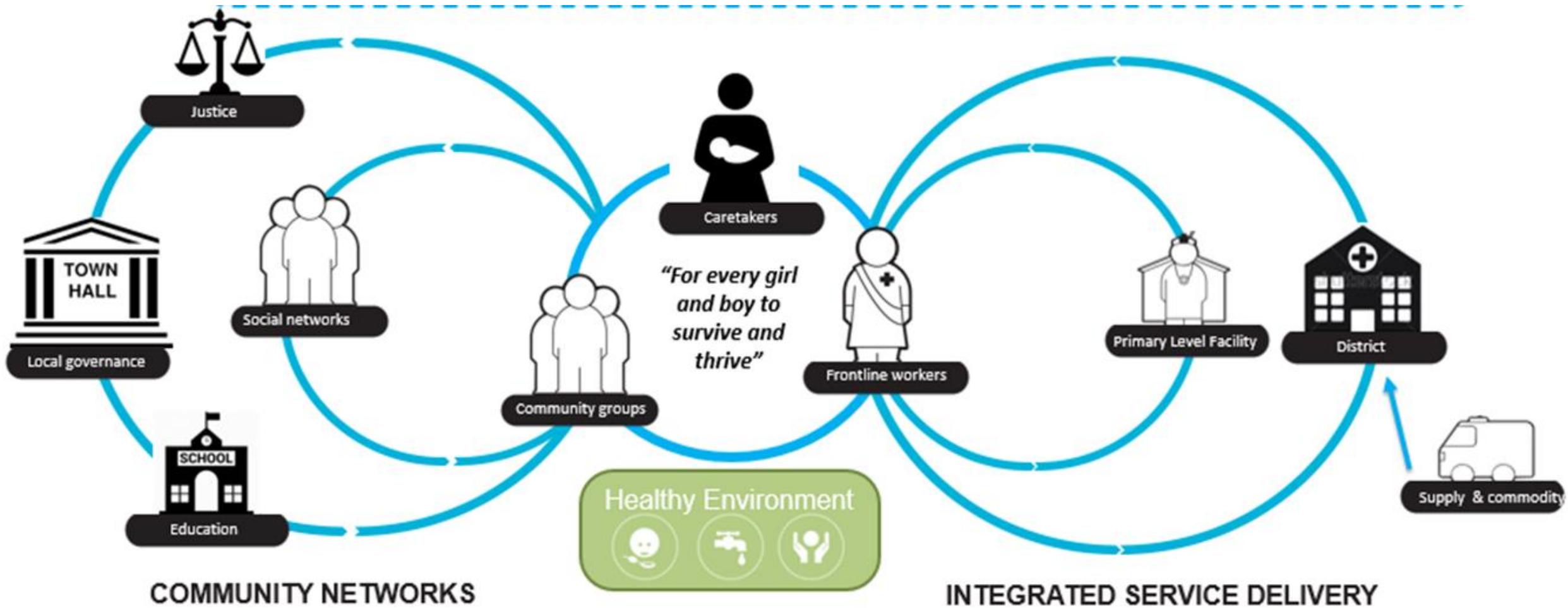
Chronic conditions  
(e.g. disability, HIV)

Sick child





# Community Systems for PHC



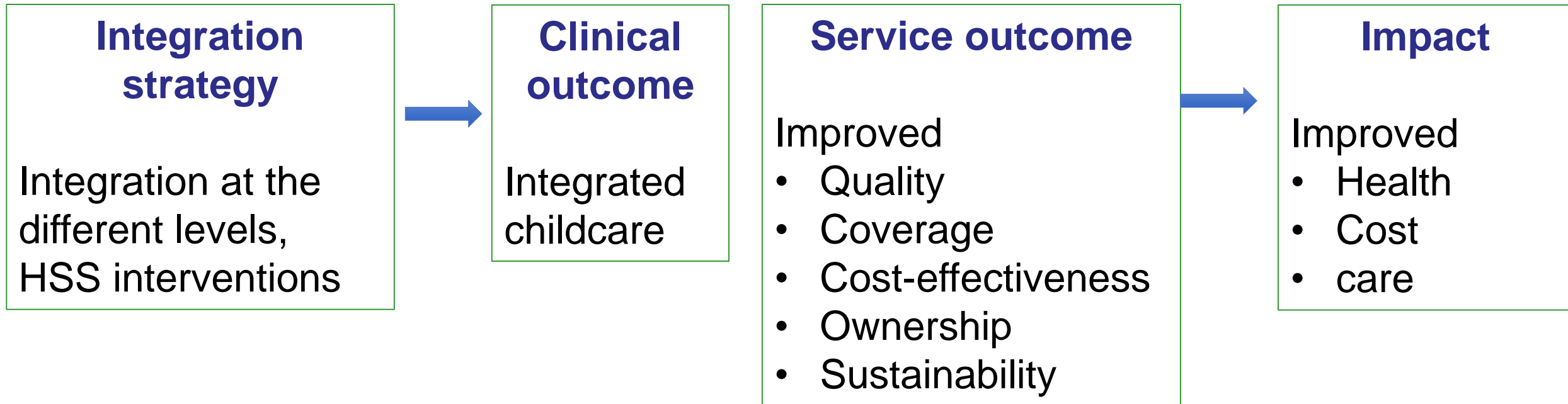
# What does it mean to integrate nutrition into health services?

## From disease-specific to systems focus

- **Patient:** receives comprehensive, child-centered care
- **Care provider:** routinely and systematically manages co-morbidities (data driven), collaboration with providers and services
- **Health manager:** commitment & coordination between programs, shared accountability
- **Policy maker:** Negotiation, prioritization to strengthen the overall system
- **Donor:** coordination of investments, flexibility, systems focus

# Integration is a strategy

- to improve prevention, diagnosis and care
- to strengthen health systems and improve efficiencies in service delivery





# Key messages

- Optimizing existing opportunities along the lifecycle will increase efficiencies
- As systems approach is essential to deliver a package of services with quality and at scale

# Thank you

unicef   
for every child

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